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8 January 1985

JAPAN REPORT

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POLITICAL AND SOCIOLOGICAL

CURRENT JAPAN-ROK-U.S. RELATIONS EXAMINED

Tokyo SEKAI in Japanese Aug 84 pp 35-41

[Article by Yasuhiro M]

[Text] President Park Chong-hee who wrested the political reins by military coup de'tat on 16 May 1969, maintained an autocratic administration for 18 ½ years based on the economic and military support from the United States and Japan. Until President Park was shot and killed by his close associates on 26 October 1979, the successive conservative political administrations of Japan used the Japan-ROK diplomatic normalization treaty (June 1965) as a pivot to "intentionally" support the ROK military regime for 14 ½ years.

The assassination of Park brought an end to the fabricated "Japan-ROK diplomatic normalization" and could have been an appropriate time to reassess all of Japan's policies concerning the Korean Peninsula. However, Japan once again closed the door for peace and eternal friendship and amity between Japan and the Korean Peninsula because it did not take any effective measure of its own and implemented actions to bolster the new military government.

The Reagan administration of the United States which started at approximately the same time as the military government of Korea under General Chon Tu-hwan, and also the Nakasone administration have declared in unison and attempted to flex a "new era in Japan-U.S.-ROK security." It is not known as yet whether the simultaneous emergence of these three parties is by coincidence or a natural course of event in history for Northeast Asia. It is clear, however, that the Japan-ROK administrations have openly established a U.S.-Japan-ROK military alliance relationship in a sector of Asia in accordance with the Reagan administration's policy of military confrontation with the Soviet Union. This will result in Japan bearing double military risks because the Chon Tu-hwan administration is strongly requesting assistance from Japan while it is replacing its policies based on "threat from the north" with policies of confrontation with the Soviet Union and expanding its military activities.

"Erroneous Judgement" toward a Military Regime

How did the government in Japan conclude a new relationship with Chon Tu-hwan's military regime which used the bloody incident at Kwangju as the stepping stone to usurp authority?

Immediately following the incident of Park's assassination, as the existence of Maj Gen Chun Tu-hwan, defense security commander became the focus of attention in the military's internal struggle for power in the "purge coup de'tat" (12 December 1979), what the conservative political, business and finance elements and the government in Japan feared most of all was that the Korean military forces might unilaterally expose the "Japan-ROK collusion" which made up the shady connection in the ROK-Japan relationship since the conclusion of the Japan-ROK basic relations treaty.

There are indicators of many instances that the LDP and government decided to assist Chon Tu-hwan achieve power, because it was apprehensive that the tremendous amount of money under the table that had flowed between Japan and Korea and the names of individuals who flocked around it would be made public, but called it a policy of taking mutual steps with the United States by the post-Park power holders.

Masayoshi Ohira's administration decided to dispatch Toshihazu Maeda (North America and Asian Affairs officer, former ambassador to Afghanistan, later ambassador to Seoul) as special envoy to get detailed information when the ROK Government took new measures and proclaimed martial law on 18 May 1980, expanding martial law over all of Korea, prohibiting all political activity among other things. Special Envoy Maeda arrived in Korea on the 21st in the midst of military power being enforced by the martial law forces suppressing the Kwanzju citizens, and stayed till 5 June. When asked to comment on the new development in Korea, Ohira who was then the prime minister replied: "We would like to exert efforts further to grasp the situation (18 May), and Masayoshi Ito, acting foreign minister also said: "We would like carefully to observe to see that the bud of democratization is not nipped," and although these were general principles, the statements clearly showed concern over the deterioration of democratization. Special Envoy Maeda met with Gen Chon Tu-hwan on 28 May, when the bloody situation which had continued for 10 days had for the most part ended. The result of this was to give "prior recognition" to the military government of the said general before anyone else in the world did.

In his report to Secretary General Ito (emergency acting foreign minister), Special Envoy Maeda stated on 5 June: "Kim Tae-jung is considered to be the ringleader in political activity from now on." He added that: "The rein of authority is held by Gen Chon Tu-hwan, however," the general said he does not intend to have a military government."

This special envoy's visit to Korea and report made on his return to Japan have come to play a vital role in the course followed by the government in Japan's aid to the Chon Tu-hwan military government. That is, they believed the point made by Gen Cho Tu-hwan: "he supports the presidential

and cabinet systems and that political agenda will be carried out within the scope provided for by the existing constitution," which ignited a misjudgement that there will be no move toward a military administration. On the other hand, it is also conceivable that it was not a misjudgement and that it was decided at an early stage that General Chon will be supported on the premise that a military administration will be established.

Furthermore, the Ohira administration had Akitane Kiuchi, chief of Asian Affairs Bureau, Foreign Ministry, visit Korea on 9 June to lay the groundwork to initiate activities on measures to be taken for the birth of a Chon Tu-hwan government. The office in charge of martial law publicly announced: "The results of an investigation concerning Kim Tai-jung's party in the sedition plot" and decided to put Kim and the others on trial before a military tribunal on 5 July. Still further on 9 July, after the sudden death of Prime Minister Ohira, a joint government-civilian "mission to Korea to promote imports" comprised of 127 people (Mitsuo Ueda, chief of mission and Nissho Iwai, president) was dispatched to Korea under the guidance of Acting Prime Minister Ito. Chief of Mission Ueda and others at that time secretly made a courtesy call on General Chon and offered cooperation to ease difficulties in the Korean economy.

The conservative elements in the political community which included the LDP government and leaders of the Democratic Socialist Party, without the slightest hesitation, approached the new Korean military government and expended efforts for the continued existence of the administration. The Japanese political, business and finance elements scurried about in unison in an effort to establish a pipeline with the new military regime, without concern for the suffering of the people of Korea who tied their hopes for democratization on a thin strand. This is demonstrated in the courtesy call on General Chon by Shin Kanemaru, former director general, Japan Defense Agency who told the general: "Your foresight is very much appreciated. Please continue to exert your best hereafter for security in Asia," and exchanged a firm handshake relaying that "efforts to have unity at the Japan-ROK level are necessary and we would like to cooperate from the standpoint that both Japan and ROK are anticommunist," clearly demonstrating that this meeting was held to confirm the "solidarity of military affairs." General Chon became the president 2 days later on the 16th.

Why did Japan engage in rapid action to such a degree and at an early stage place its hopes on the birth of a Chon administration?

It is pointed out that first it was because of being plagued by a "sense of being intimidated" due to the fact that, as stated earlier, the "Japan-ROK collusion" under the Park government which had been criticized was investigated in detail by Gen Chon Tu-hwan and will be bared and made public at any moment.

The second is that Japan initiated action, pursuant to its basic attitude of putting national interest first, and since "unrest in Korea will disturb peace in Japan," it took action to support a political force which will bring about stability swiftly within the country, no matter what type of administration it is.

On 12 July of the same year, Okita, then foreign minister, stated: "From the standpoint of Japan's national interest, it is not desirable to have Korea become weak." The said foreign minister indicated an opinion: "The Japan-ROK relationship should be viewed from the overall standpoint of the camp of free nations. Even while there is great interest in the political problem of Korea (including the matter of Kim Tae-jung), I would like to reserve making a public comment from the outside," and deliberately made it ambiguous using noninterference as a reason. However, when all of the approaches made to the ROK by the Ohira and Suzuki cabinets are examined, contrary to noninterference, they have actively initiated action and strongly pushed for the birth of a new military administration. While, on the other hand, not only did they not make a clear explanation to the people of Japan but it seems that they also intentionally attempted to twist and hide matters. The administrations of both Ohira and Suzuki had a common factor, similar to that of the prior successive LDP government administrations, and they have tried to get the consensus of the people concerning their Korean policies and have attempted to deal with it in extreme secrecy.

"New Japan-ROK Dimension"

The Nakasone government which came into being at the end of November 1982, with slogans "Easily understood politics" and "Responsible execution" pressed for contact with the Chon administration, and 3 days after he assumed office he told the Chon government: "We would like to have mutual cooperation in order to bring the Japan-ROK relationship to a higher dimension" by an international phone call and made an electrifying visit to Korea a month later in January 1983.

This was the first official visit to Korea from among the successive prime ministers of Japan and the two leaders; Cho Tu-hwan and Nakasone announced the first Japan-ROK joint communique which included new "Korean Peninsula clauses" that: (1) the Korean Peninsula is important for the maintenance of peace and stability to East Asia including Japan, (2) efforts will be made for peace, stability and prosperity in this region and (3) the efforts for defense by Korea is highly appreciated.

The point which merits special attention is item three of the communique: "the defense efforts of ROK in contributing toward the preservation of peace in the Korean Peninsula are highly appreciated." To date there has not been a clear indication concerning Japan's understanding of security toward Korea. Furthermore the ROK side announced: "Basic agreement was reached that the makeup of U.S.-ROK-Japan security cooperation must be further tightly knit" and declared a "new dimension in Japan-ROK relationship" because it seems that the Chon Tu-hwan administration decided to push for a "Japan-ROK military solidarity during Nakasone's visit to Korea since this was indispensable in promoting a U.S.-ROK-Japan military alliance.

Prime Minister Nakasone indicated complete support of this and further expanded approval of the Cho Tu-hwan administration paved by both the Ohira and Suzuki administrations but as always, hid unfavorable facts from the people of Japan and took the attitude from the beginning to the end of circumventing explaining its policies.

With regards to this type of statement by ROK calling for "strengthening the tripartite structure," the officials from Japan who accompanied the prime minister deny it and continue to say that no concrete discussion was held on the security problem or economic cooperation.

On 6 January 1983, just prior to Nakasone's visit to Korea, agreement was in fact reached during negotiation by the Japan-ROK working level group on the economic cooperation problem (the request by Korea for larger loans from Japan). The details of such cooperation is: (1) the total amount is \$4 billion of which \$1.85 billion will be in yen currency credit loan, (2) the period will be for 7 years beginning with FY 82 and (3) the overall interest rate will be at the 6 percent level.

The Korean economy is faced with depressed exports, increased accumulation of foreign bond and stagnation of business, which it had not experienced to date and had been compelled to greatly amend its "Fifth 5-year socio-economic development plan" which was started in 1982. Therefore, the total amount of \$4 billion (approximately 920 billion in yen currency) or an average of \$571 million (131.43 billion yen currency) flowing into ROK per annum, no doubt was understood by ROK to be a strong support for security.

When this was announced by the ROK government, all of the newspapers in Korea gave big publicity to it and said: "It indicates the new understanding of Japan concerning security in Northeast Asia," and transposed the \$4 billion cooperation as "the start of U.S.-ROK-Japan cooperation structure."

Reverting Back To Military Cooperation

Prime Minister Nakasone, since he assumed office has of course emphasized strengthening Japan's defense capability, as well as the faithful performance of her role as a member of the Western camp, and has not stopped at merely restoring the ROK-Japan relationship but further moved into security cooperation. Further, just when he was to visit the United States a week later, he obtained gifts to bring which would be most welcomed by President Reagan: the realization of a visit to Korea and Japan's involvement with Korea in the security of Japan.

The policies of Japan toward Korea basically follow the policies of the successive United States Government administrations toward Korea.

The Japan-ROK joint communique issued at that time followed the policies established at the U.S.-ROK leadership conference when Chon Tu-hwan visited the United States. Only a mere 10 days after President Reagan assumed office, it was an appropriate opening of a "new U.S.-ROK era" to select President Chon to participate in the first meeting of leaders of allies.

One factor which brought this about was that in November 1980, Reagan representing the conservative elements in the United States defeated the Carter administration which had promoted, in one way or another, a diplomacy with emphasis on human rights and which attempted to make a gradual withdrawal of U.S. Forces stationed in Korea. The Reagan administration

strengthened the alliance with Japan and ROK and implemented Northeast Asian policies which caused the Soviet Union to be strongly apprehensive. The first move in this context was President Chon's visit to the United States. The U.S.-ROK joint communique at this time focused on two points: 1. The retraction of the white paper concerning withdrawal of U.S. Forces stationed in Korea; 2. Pledge to strengthen U.S.-ROK security cooperation for the peace and stability of Northeast Asia. This was done because they were required to be concluded in order to permit President Reagan to implement "power policies" in Asia. It can be seen that in order to carry out "power policies" against the Soviet Union, the underlying factor is that no questions will be asked, no matter what type of administration exists in Korea, as reflected in the statement that: "human rights diplomacy will be waived and emphasis will be on security," (made by a high official of the U.S. State Department). At this time, President Chon clearly expounded that Korea is the "fortress of the United States and Japan" in the Pacific region and emphasized consistently that the U.S.-ROK-Japan tripartite is a strategic partnership.

The Nakasone and Chon Tu-hwan joint communique was written following the agreed basic U.S.-ROK understanding.

All government administrations of Japan subsequent to the Sato administration, have made it "customary" to have a mutual understanding with the United States concerning the situation on the Korean Peninsula. In the joint communique by Nixon and Sato in November 1969, it was recognized for the first time, "the existence of a condition of tension on the Korean Peninsula" and expressed that "the security of Korea is vital to the security of Japan itself." Thereafter this has been fixed as a "Korean clause." It means that it has been confirmed between the United States and Japan that in case of an emergency in Korea, the U.S. military bases in Japan, including those on Okinawa will function as the keystone for the military strategy of the United States.

From its onset the "Korean clause" was based on the premise of U.S.-Japan military alliance.

The Miki-Ford conference of August 1975 resulted in the issuance of an indirect expression: "for the maintenance of peace over the entire Korean Peninsula" which slightly toned down the military factor and this was termed the new "Korean clause." In the March 1977 meeting between Fukuda and Carter, it was expressed in general terms: "it is important for the security of Japan and all of Asia...."

Although the same words as the new "Korean clause" was used in the joint communique by Nakasone and Chun Tu-hwan, it stresses the point that "Korea is the fortress for the United States and Japan." In response to Korea's request for security and economic cooperation, Prime Minister Nakasone, as tangible evidence of implementing such a request, made \$4 billion available and as stated earlier added the words "highly appreciate the defense efforts of Korea." This resulted in retrogression to the old "Korean clause" with a strong military taint to it.

This "new U.S.-ROK-Japan era" became all the more clear in President Reagan's visit to Japan and Korea in November 1983.

"Fortress" in Military Strategy Against the Soviet Union

President Reagan's visit to Japan and Korea was for the purpose of strengthening the web to envelop the Soviet Union including the DPRK (North Korea) and he visited ROK after having Prime Minister Nakasone express that Japan will: "perform its role as a member of the West" and "strengthen military power." In the U.S.-ROK joint communique made in Seoul on 14 November, President Reagan included in it: "It is noted that the security of Korea is the axis of peace and security in Northeast Asia and is very vital to the security of the United States," and reaffirmed that the United States will continue to abide by the strong public pledge it has made to guarantee the security of Korea, continue to maintain and strengthen the capabilities of U.S. Forces in Korea and continue to make available the necessary military weapons and technique to strengthen the military capabilities of the ROK military forces."

The factor which has been conspicuous whenever the three leaders; Chon Tu-hwan, Nakasone and Reagan visited each other is their determination to tread the path of military confrontation. President Chon Tu-hwan's "Korea fortress theory" goes considerably beyond the concept of preparation for "threat from the North" which has been Korea's security concept heretofore and brings about the major change of establishing ROK as a "forward base" in the military strategy of the United States against the Soviet Union. The ROK military which prides itself as the fourth largest army in the world and which started as a mere military entity within Korea as a result of it being divided into the north and south, has risen to become an important military organization in the Asia-Pacific region and an important "link" in the military activity by the United States to envelop the Soviet Union.

High officials of the U.S. Government and top military officers have repeatedly pointed out in clear statements since 1982 that there will be no hesitation in utilizing nuclear weapons and the Korean Peninsula together with the Middle East are points for simultaneous multiple retaliation strategy against the Soviet Union. Korea's policies to strengthen its military power have already gone beyond the wish and control of the Korean people and are pillars supporting the United States, a country of nuclear bases.

While the Chon Tu-hwan administration is taking a military course of action such as this (based on the theory of a U.S.-Japan fortress), Prime Minister Nakasone, on the other hand, without obtaining the consent of the people of Japan, has responded with policies to have a Japan-ROK military alliance which is contrary even to Japan's Constitution.

Sense of Crisis by the Korean People

When viewed in this light and as compared to the various LDP administrations which were beginning to grope for a policy for Korea from the standpoint of

the entire Korean Peninsula, the Nakasone administration's policy concerning Korea entails a military danger.

When viewed in light of the Korean problem, the policy of security cooperation with ROK has the effect of making normalization with North Korea further removed and promoting a policy of regarding it all the more as an enemy. Additionally, since it embodies indirectly an emphasis of taking a strong stance against the Soviet Union, it endangers more than heretofore the "peace and stability" of Northeast Asia, itself, and is one of the reasons behind the situation of unnecessary military tension.

As to the case of the bloody Kwangju incident, the basic premise of the Chon Tu-hwan government which was not actually born of the freewill of the Korean people and which therefore continues to be questioned about its legitimacy, has been constantly to cover up by means of diplomacy the frail foundation of its authority which could be said to be fatal domestically. At the moment it appears that the policy to elevate the position of ROK in Asia by making it the fortress of Japan and the United States and for ROK to thereby receive military and economic assistance which are necessary for it to maintain authority is proceeding smoothly.

The security cooperation structure made up of the U.S.-Japan-ROK tripartite are in wonderful agreement on the point of completely ignoring the trend of public opinion in Korea but an unprecedented sense of danger is growing among the Korean people about making the Korean Peninsula a site for nuclear warfare. The role of the United States and Japan as outside forces supporting the military administration have been clearly pegged and anti-American and anti-Japanese sentiments have erupted as seen in the incident of arson at the U.S. cultural center and the matter of the textbook problem. This is because the people of ROK are fully aware that the linkage of the leaders of the three nations; Reagan, Nakasone and Chon Tu-hwan are functioning to bring about the danger of warfare occurring again on the Korean Peninsula and they are not establishing cooperative structures between the U.S.-ROK-Japan for peaceful purposes based on the will of the people of Korea.

The U.S.-ROK-Japan three-party relation is a deformed triangle formulated with the "ROK-U.S. mutual defense treaty" concluded in the 1950's and the "Japan-U.S. security pact" of the 1960's as its two pillars. However, the administrations of both the United States and Japan which have recently coped with the Chon Tu-hwan government as the central focus, have further advanced the Japan-ROK military linkage and in reality have established a bridgehead for a Japan-ROK military alliance pact. Pressure is being exerted for a decision which is very important for the people of Japan.

In January 1984, with the ROK-U.S. discussion as the axis, a formal proposal for a "three-party conference" was submitted by the DPRK, to be held between North and South Korea and the United States to change the treaty concerning the suspension of the war in Korea to a more permanent peace treaty. With China as the intermediary, this proposal which included policies for the withdrawal of U.S. Forces stationed in Korea and mutual

reduction of military strength by both the North and South has a vital effect in changing the rigid and unyielding attitude concerning the Korean Peninsula.

The current administrations of both ROK and Japan, however, have not been able to implement effective measures to take against such new movements. This is because of the strong intent of the current ROK government, that in order for it to continue its political authority, it must strongly persist on the heightened tension and permanent division by eliminating North Korea and isolating it internationally. It is self-evident that the Nakasone administration which makes the support of the military administration its major objective, is not able to follow the tide of easing tension. It has already been promptly exposed that it has a fatal flaw: policy on Korea which does not envision the entire Korean Peninsula.

Nineteen years have elapsed since the wrong button called the "Japan-ROK normalization" treaty was used and unless this is basically corrected and an overall review of the "Korean clause" is made, tension in North East Asia will not be eased.

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CSO: 4105/284

ECONOMIC

STRATEGIC GOODS, TECHNOLOGY EXPORT REGULATIONS

Tokyo MITI in Japanese 1983 pp 1-87

[Pamphlet: "Export Regulations for Strategic Commodities and Technology"]

[Text] 1. Introduction

Our country's policies on export controls, while taking free trade as fundamental, aim to contribute to the sound development of our country's economy by maintaining the least necessary controls and regulation over foreign commerce. This is specified in the Foreign Exchange and Foreign Trade Control Law (hereafter, the Foreign Exchange Law), which is our country's basic ordinance on trade regulation.

That is, in Article 1 of the Foreign Exchange Law it is stipulated that "With foreign trade and other foreign business being freely conducted as a basic, we shall contribute to the normal development of foreign commerce by keeping controls and regulations over foreign business to the minimum necessary. Under this concept, in our country when strategic goods or technology are to be exported (with technology, it is called a resident supplying to a nonresident) to specified regions, it is held necessary to obtain prior approval or permission from the Ministry of International Trade and Industry [MITI].

This pamphlet was drawn up to help raise the understanding of those engaged in the export business about procedures for exporting strategic goods and technology under the Foreign Exchange Law.

2. Basics of Export Procedures

(1) In our country it is necessary to get the approval of MITI for exports of strategic goods to the designated areas, and the minister's permission to supply strategic technology from a resident to a nonresident for the specified areas.

(2) For the goods one wishes to export, the customs will confirm whether it is necessary to get MITI's approval, and furthermore for goods on which his approval is needed, will confirm whether or not export approval has been obtained.

(3) Moreover, persons who export such goods or provide such technology without obtaining MITI's approval or permission are subject to penalty in accordance with the provisions of the Foreign Exchange Law.

3. Details on Strategic Goods and Technology

(1) What are termed "strategic goods" are those items on which, in accordance with agreement among the free nations, controls over exports to the communist bloc are maintained. It means (1) items in the Export Trade Control Ordinance (hereafter, the "Export Ordinance") Table 1, wherein the area column shows "A area," and (2) atomic materials and weapons among the items shown for "All areas."

Specifically, strategic goods subject to export controls are those goods mentioned in Export Ordinance Table 1 in the middle column of Items 4-5, 7-10, 12, 17-19, 21-22, 25, 27, 31-32, 42-44, 46-49, 51, 54-55, 57-62, 64, 66-67, 71-73, 75-83, 90-91, 93-94, 96, 98-101, 104-111, 113-123, 125-131, 134, 136-153, 155-157, 159, 161-165, 167-168-2, 170-2 through 174, 175-178 and 196-205. (For the names, please see Export Ordinance Table 1, pages 24-87.)

(2) Just as with strategic goods, what is termed "strategic technology" is that technology on which controls over exports to the communist bloc are maintained.

Specifically, it means--

(1) Technology relating to the design, manufacture or use of the strategic goods in (1)(1) (technology listed in the middle column of Items 4 and 5 of the table attached to "Ministry Ordinance on Controls Over Trade-related Transactions Other Than Trade," as well as the technology listed in the middle column of Item 3 of the same table (except technology relating to the design, manufacture or use of goods stipulated in the notification based on Item 168 of Table 1 of the Export Ordinance).

(2) Technology on which, relating to the strategic goods in (1)(1), it is held that there should be controls; technology listed in the middle column of Items 1 and 2 of the table in "Ministry Ordinance on Controls Over Trade-related Transactions Other Than Trade"; and also technology listed in the middle column of the table of Item 3 (limited to technology relating to the design, manufacture or use of the goods stipulated in the notification based on Item 168 of Export Ordinance Table 1).

Table 1. Ministerial Ordinance on Control of Trade and Transactions Other Than Trade (55 MITI Ordinance No 64)

Technology	Area
1. Technology relating to the design or manufacture of encapsulated thin-film passive circuits.	A area stipulated in Footnote 1 of Table 1 of the Export Trade Control Ordinance (hereafter called "A area")
2. Technology relating to design or manufacture of pellets or wafers used in manufacture of integrated circuits	A area
3. Technology relating to design, manufacture or use of items which are recording devices and reproducing devices, developing devices and recording media parts and accessories relevant to any of the following: (a) Magnetic recording devices or magnetic reproducing devices (except those for voice or music and those using a magnetic card of 85 cm ² or less as the recording medium); the parts for these, or the recording media used with them. (b) Recording devices for images or designs, or reproducing devices using electronic beams or laser light (except those for recording discs for television and facsimile devices using laser light), the parts for these and their accessory printing devices or recording media.	A area
4. Technology relating to the design, manufacture or use of goods listed in the middle column of the Export Trade Control Ordinance Table 1, Items 4, 7-10, 12, 17-18, 21-22, 25, 27, 31-32, 42-44, 46-47, 49, 54-55, 57-61, 64, 66-67, 71-73, 75, 77-78, 83, 90-91, 93-94, 96, 98-101, 104-108, 110-111, 113-123, 125-131, 134, 136-153, 155-157, 159, 161-165, 167, 168-2, 170-2 through 174, 175-178 and 196.	A area
5. Technology relating to the design, manufacture or use of goods listed in the middle column of Export Trade Control Ordinance Table 1, Items 5, 19, 48, 51, 62, 66-2, 76, 79-82, 109 and 197-205.	All areas

Note: Please see Export Ordinance Table 1 for names in 4 and 5.

4. Areas Subject to Strategic Goods and Technology Regulation

(1) The area requiring approval or permission for the export of strategic goods and technology is the abovementioned "A area," which is--

Afghanistan	India	Poland
Albania	Indonesia	Portugal (including Macao and Portuguese Timor)
Algeria	Ireland	South Yemen
Angola	Italy	Spain
Austria	Jamaica	Sri Lanka
Belgium	Kenya	Sweden
Bulgaria	Korea (excluding area ruled by Rep. of Korea)	Switzerland
Burma	Laos	Tanzania
Cambodia	Luxembourg	Trinidad-Tobago
Canada	Malaysia	Turkey
Cuba	Malta	Union of Soviet Socialist Republics
Cyprus	Mongolia	United Kingdom (including Antigua, Belize, Bermuda, Brunei, Falkland Islands, Gibraltar, Hong Kong, Montserrat, St. Helena, St. Kitts, and the Virgin Islands)
Czechoslovakia	Morocco	United States of America
Denmark	Mozambique	Vietnam
Egypt	Nepal	Yugoslavia
Ethiopia	Netherlands	Zaire
Finland	Nigeria	Zambia
Taiwan	Norway	
France	People's Republic of China	
Germany		
Greece		
Hungary		

(2) Also, areas subject to regulation for atomic-power related goods or arms, or to facilities related to arms manufacture in all areas.

5. Handling Exports of Strategic Goods and Technology to Communist Bloc Nations

In principle, the export of strategic goods or technology go communist bloc nations will not be approved.

6. Handling Strategic Goods and Technology Exports to Countries Other Than Communist Bloc Nations I/C-D/V System

(1) When strategic goods are to be exported to countries other than the communist bloc, the I/C-D/V system (import certificate, delivery verification) is followed in order to bar any diversions to the communist bloc.

(Table) List of I/C-D/V-TAC Issuing and Requesting Countries

	I/C and D/V		TAC (Note 1)
	Issuing nation	Requesting nation	requesting nation
Algeria	o	o	o
Argentina		o	
Austria	o	o	
Australia			o
Belgium	o	o	o
Brazil		o	
Canada	o	o	o
Cyprus	o		o
Denmark	o	o	o
France	o	o	o
Federal Republic of Germany	o	o	o
Ghana	o	o	
Greece	o	o	o
Italy	o	o	o
Israel			o
Jamaica	o		
Kenya	o		
Luxembourg	o	o	o
Malaysia	o	o	
Malta	o		o
Morocco	o	o	o
Mozambique	o	o	o
Netherlands	o	o	o
New Zealand			o
Norway	o	o	o
Philippines			o
Portugal	o (Note 2)	o (Note 2)	o (Note 2)
Singapore	o	o	
Republic of South Africa	o	o	o
Tanzania	o		
Trinidad-Tobago	o		
Turkey	o	o	o
United Kingdom	o (Note 3)	o	o (Note 4)
United States of America	o	o	o
Zaire	o	o	o
Zambia	o	o	o
Finland	(Note 5)		
Hong Kong	(Note 6)		o
Ireland	(Note 7)		
Macao	(Note 8)	o	o
Nigeria	(Note 9)	o	
Spain	(Note 10)		
Sweden	(Note 11)		o
Switzerland	(Note 12)	o	o
Yugoslavia	(Note 13)		

(Notes)

1. TAC is the abbreviation of transit authorization certificate, and will be explained later.
2. Includes Portuguese Timor.
3. Includes Antigua, Belize, Bermuda, Brunei, Falkland Islands, Gibraltar, Montserrat, Solomon Islands, Southern Rhodesia, St. Helena, St. Kitts, and the Virgin Islands.
4. Includes Gibraltar.
5. End-use Certificate issued by Finland's Trade and Industry Ministry.
6. EIL (Endorsed Import License) issued by the Hong Kong Government.
7. End-use Certificate issued by Ireland's Trade and Industry Ministry.
8. I/C issued by the Macao Government.
9. EIL issued by Nigeria's Trade and Industry Ministry.
10. EIL issued by Spain's Chamber of Trade, Industry and Shipping.
11. End-use Statement issued by Sweden's Chamber of Commerce and Industry, as well as certificates issued by the Swedish Embassy in Japan and having the effect of an import permit.
12. I/C (Blue Certificate) issued by the Swiss Government.
13. End-use Certificate issued by the Yugoslav Chamber of Commerce and Industry.

(2) The I/C-D/V system is for the purpose of barring the diversion of strategic goods to the communist bloc by confirming that, when strategic goods are to be exported to countries in the above table, the exported cargo definitely arrives at its destination.

(3) When one wishes to export strategic goods to the countries in the above table, if the exporter does not enclose the original of the import certificate (I/C) issued by the country of destination in the export approval request, export approval cannot be given. This I/C is issued by the government of the importing country based on the request of the importer. The original is delivered by the importer and copies are sent directly to the government of the exporting country. Consequently, when it is confirmed that the original of the I/C accompanying the export approval request tallies with the copy sent from the government of the importing country and does not differ from it, approval is to be given for the export. However, Finland, Hong Kong, Ireland, Macao, Nigeria, Spain, Sweden, Switzerland and Yugoslavia issue documents in lieu of I/C's.

(4) When the export is approved, it is under the condition that there is a responsibility for the delivery verification (D/V) issued by an agency of the importing country's government in the remarks column of the approval document to be provided within a stipulated period after loading the cargo.

7. Where To Request Approval for Export of Strategic Goods and Technology

(1) For approval of the export of strategic goods, please make the request at the office in charge, according to the following classifications:

(a) Those requesting approval of the International Trade Bureau et al.:

(i) ① Cargo listed in Export Ordinance Table 1 in Items 4, 7-10, 12, 17-18, 21-22, 25, 27, 31-32, 42-44, 46-47, 49, 54-55, 57-61, 64, 66-67, 71-73, 75, 77-78, 83, 90-91, 93-94, 96, 98-101, 104-108, 110-111, 113-123, 125-131, 134, 136-153, 155-157, 159, 161-165, 167-168-2, 170-2 through 174, 175-2 through 178, and 196.

② When exporting to destinations in Afghanistan, Angola, Burma, Cambodia, Cuba, Egypt, Ethiopia, India, Indonesia, Laos, Nepal, South Yemen and Sri Lanka.

(ii) ① Cargo listed in Export Ordinance Table 1 in Items 7-9, 12, 17-18, 21-22, 27, 31-32, 42-44, 54-2 through 55, 57-61, 64, 72-73, 75, 77-78, 83, 90-91, 93-94, 98-101, 104-108, 110-111, 113-117, 119-123, 125-131, 134, 136-148, 150-152, 155-157, 159, 161-2 through 165, 167-168-2, 170-2 through 174, 175-3 and 176.

② For those where the total value is \$5,000 or less.

③ When exporting to destinations in Algeria, Austria, Belgium, Canada, Cyprus, Denmark, Finland, Taiwan, France, Federal Republic of Germany, Greece, Ireland, Italy, Jamaica, Kenya, Luxembourg, Malaysia, Malta, Morocco, Mozambique, Netherlands, Nigeria, Norway, Portugal (including Macao and Portuguese Timor), Singapore, Republic of South Africa, Spain, Sweden, Switzerland, Tanzania, Trinidad-Tobago, Turkey, United Kingdom (including Antigua, Belize, Bermuda, Brunei, Falkland Islands, Gibraltar, Hong Kong, Montserrat, St. Helena, St. Kitts and Virgin Islands), United States of America, Yugoslavia, Zaire and Zambia.

(b) Those requesting approval of this ministry when (a) above does not pertain.

(2) Please request export approval for strategic technology to this ministry's Exchange and Finance Division in the International Trade Bureau. (For details, please see "Information" in Note 2 (page 21).)

8. Certifying Nonapplicability

(1) The system for certifying nonapplicability is one whereby MITI certifies that specified goods do not fall under Table 1 of the Export Ordinance (in

other words, that export approval is not necessary), with the aim of reducing the load of administrative procedures for exporters and the customs.

(2) In particular, for those items confirmed as being goods distributed in the general market or exported by many exporters and not corresponding to the goods listed in Table 1 of the Export Ordinance, a nonapplicability list has already been published.

(3) As for commodities to which Table 1 of the Export Ordinance does not apply but which are not listed in the nonapplicability list, certifications of nonapplicability are being issued individually according to requests from exporters. Finally, as for goods for which nonapplicability certification has been issued, they are being additionally published in instances where there is a request for their inclusion in the nonapplicability list.

9. Penalties for Violating Foreign Exchange Regulations

(1) In cases where strategic goods or technology are exported without obtaining approval of permission from MITI, penalties shall be imposed in accordance with Article 70 of the Foreign Exchange Law.

(Reference)

Foreign Exchange Law

Article 70. Persons to whom Item 1 below applies shall be sentenced to not more than 3 years imprisonment or a fine of 1 million yen, or both. However, when triple the value of the objects of the said violation shall exceed 1 million yen, the fine shall be no more than triple the said value.

20 Persons who did not receive permission under the provisions of Article 25 and who engaged in a transaction provided for under the stipulations of orders based on the provisions of the same Article

29 Persons who exported goods without getting approval according to the provisions of orders based on stipulations of Item 1 of Article 48

(2) Concerning violations of reporting responsibilities

MITI may, within limits necessary for enforcing the Foreign Exchange Law, call for reports from persons engaging in transactions falling under the Foreign Exchange Law's purview or from persons connected therewith. Should persons asked to make reports not provide those reports or make false reports, they may be fined under Article 72 of the Foreign Exchange Law.

(Reference)

Article 72. Persons falling under the provisions of the following item will be sentenced to prison for not more than 6 months, or will be fined not more than 200,000 yen.

8 Persons who, in violation of the provisions of orders based on the stipulations of Article 67, do not provide reports or who give false testimony.

10. Related Laws and Regulations

(1) Export of strategic goods

(1) Foreign Exchange and Foreign Trade Control Law (excerpts of relevant sections)

(Permission to export)

Article 48. Those wishing to export goods of specified types or to destinations in specified areas, or those wishing to export goods under specified transactions or methods of payment are to bear the obligation to obtain MITI approval as specified in government regulations.

2 Limitations set by government regulations according to the above item may not exceed the scope needed to pressure a balance in international payments and the sound development of foreign trade and the national economy.

Article 70. Persons to whom any one of the following items is pertinent shall be sentenced to prison for not more than 3 years or fined not more than 1 million yen, or both. However, when triple the value of the items involved in the said illegal act exceeds 1 million yen, the fine shall be not more than triple the said value.

29 Persons exporting goods without obtaining permission according to provisions in orders based on the provisions of Item 1 of Article 48.

Article 73. Whenever a corporation's agent (including any corresponding to the bodies stipulated in Article 26 Section 1 Items 2 and 4, and Section 5 of the same article. Hereafter will be the same throughout this Section), the corporation, a personal representative, employee or other working staff member shall commit an illegal act under Articles 70, 71 and preceding articles with respect to that corporation's or person's duties or property, the perpetrator shall be punished, and the corporation or person shall be fined under each main Article.

2 In cases of penalties being levied on those corresponding to the bodies stipulated in Article 26 Section 1 Items 2 and 4 and Section 2 of the same Article, its agents or officers are to represent that body in the court actions; and the provisions of laws relating to criminal suits where the corporation is the defendant shall apply.

(2) Export Trade Control Ordinance (excerpts of relevant sections)

(Approval for export)

Article 1. Persons wishing to export goods, when the item below applies, will follow procedures set by MITI regulations and must obtain approval from MITI's minister in writing.

I When one wishes to export any goods listed in Table 1's middle column, to an area listed in the lower column of the same table.

(Customs confirmation)

Article 5. In line with MITI instructions, the customs must confirm that persons wishing to export goods have obtained approval in accordance with the provisions of Article 1 Section 1, or that such approval need not be obtained.

(3) Export of technology relating to the design, manufacture or use of strategic goods (supplying it to nonresidents)

① Foreign Exchange and Foreign Trade Control Ordinance (excerpts of relevant sections)

(Service transactions, etc.)

Article 25. When a resident wishes to make a transaction (excluding any corresponding to such things as concluding a contract for technology induction as stipulated in Article 29 Section 1), as determined by government ordinance, the competent minister for the transactions listed in Article 18 Section 1 of the Foreign Exchange Control Ordinance is held to be the MITI minister. (See Article 3 of government regulations that determine the competent minister in the Foreign Exchange and Foreign Trade Control Law.)

II Transactions relating to commodity deals accompanying service transactions and the movement of goods among foreign nations, and recognized as being an obstacle to our country's faithful fulfillment of treaties it has concluded, as well as to other international commitments and to the preservation of international peace and security.

② Foreign Exchange Control Law (excerpts of relevant sections)

(Service transactions)

Article 18. Transactions determined under the laws and regulations specified by the Law's Article 25 shall be those transactions listed below.

IV Transactions which supply technology to the specified areas relating to the design, manufacture or use of the specified kinds of goods which are recognized to constitute a barrier to preserving the international peace and security (limited to those which MITI has designated).

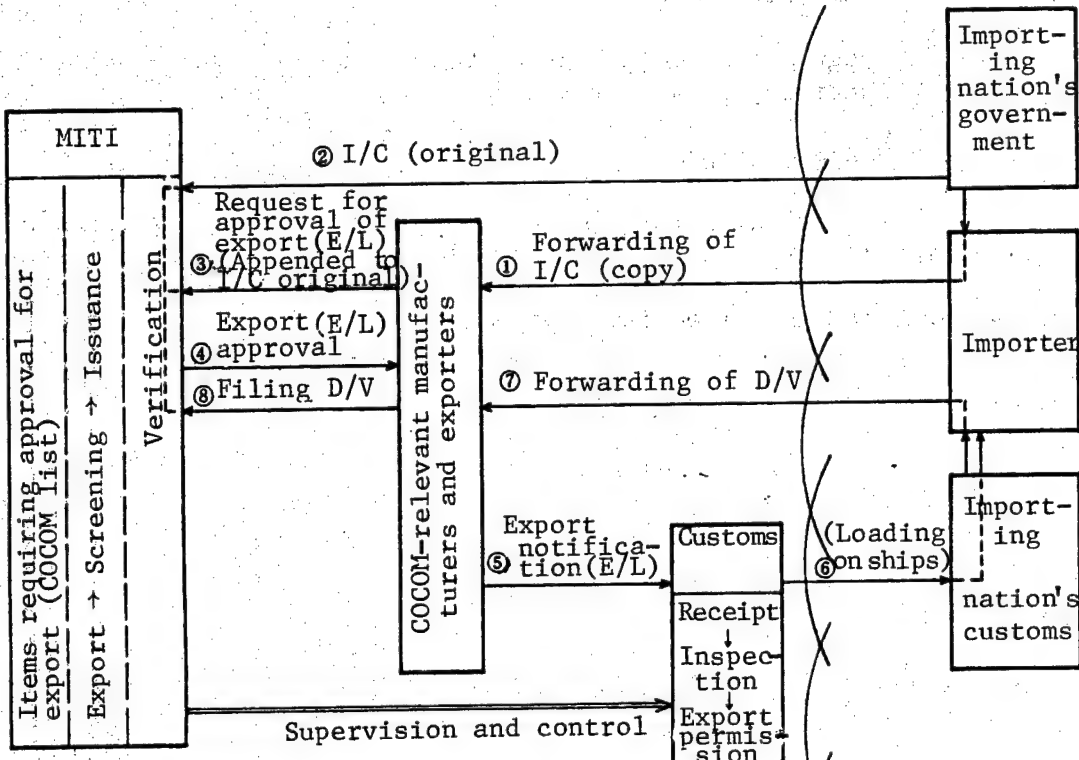
2 When a resident wishes to obtain the permission of the finance minister or MITI minister as stipulated in the Law's Article 25, he must request such permission according to procedures set by the regulations of the Finance Ministry or MITI.

③ Ministry regulations relating to the control of trade-related nontrade transactions, et al. (excerpts of relevant sections)

(Designation of transactions providing technology)

Article 9. Transactions which MITI designates as stipulated by the Law's Article 18 Section 1 Item 4 shall be those transactions for supplying the technology listed in the Table's middle column to the areas listed in the same Table's lower column. (See Table on pages 4-6)

Reference 1. Outline of Export Procedures for Strategic Goods



- Notes:
1. E/L Export License (Export Law Article 1 Section 1)
 2. I/C Import Certification
 3. D/V Delivery Verification
 4. As with the case of weapons, a nonapplicability certification system has been instituted.

Based on the Foreign Exchange Law promulgated 1 December 1980, when conducting transactions for supplying technology (including know-how) relating to the design, manufacture or use of strategic goods, it has recently become necessary to get MITI permission as noted below, besides past limitations on the export of weapons-related technology. (Authority: Foreign Exchange and Foreign Trade Control Law Article 25; Foreign Exchange Control Law Article 18 Section 1, Item 4; Ministry Ordinance on Controlling Trade-related Nontrade Transactions, Articles 9 and 10.)

NOTES

1. For which technology relating to the design, manufacture or use of goods and in which areas where it is supplied is permission necessary?

Please see the table on pages 4-6.

2. Procedures for requesting permission

Please provide the Exchange and Finance Division, Trade Bureau, MITI, with two copies of the request form in the style of Appendix 2 (blank forms for sale on the market), one copy of a memo explaining the request (any form is acceptable) and one copy of documents sufficient to attest to the facts of the transaction (copy of contract, documents relevant to details of the technology).

3. When to submit the requests

When one wishes to conduct the transaction for supplying the said technology. (Concretely, the time of contracting or when the transaction is to be effected based on the contract.)

4. Warnings

(1) In cases of technology being provided along with the exported goods, as well as in cases where under contract both constitute a unit, in addition to the export procedures for acquiring an E/L relating to the goods, it shall be necessary to acquire a separate original permit.

(2) When a transaction relating to the supply of the technology on which it was determined that an original permit would be needed is conducted without a permit, it shall be punishable under the Foreign Exchange Law.

(3) In addition, please make inquiries relating to the original permit to the following: Special Technology Control Unit, Exchange and Finance Division, Trade Bureau. Phone: 501-1511 (Ext. 2711-2714).

[SAMPLE FORM]

Appendix 2

Authority: Ministry Ordinance on
Control of Trade-related Nontrade
Transactions, Article 10 Section 1

Responsible Office: MITI

Request for Permit Relating to Service Transaction

The Honorable Minister of International Trade and Industry:

Requester's name: _____ (Name Seal)
Address/residence _____
Location: _____

Date of request:
*Date of permit:
*Permit No.:
*Effective period:

Person in charge: _____
Telephone: _____

Request made as follows:

1. Outline of transaction
 - (1) Name or designation of other party _____
 - (2) Address/residence and location of other party _____
 - (3) Term, starting and ending dates of contract _____
 - (4) Details on service _____
2. Matters concerning payment
 - (1) ☒ payment ☒ receipt for payment ☒ payment and receipt
 - (2) Method of payment _____
 - (3) Amount of payment _____
 - (4) Dates of payment _____
 - (5) Name or designation of other party in payment _____
 - (6) Address, residence and location of
other party in payment _____

Above
request

Under provisions of Foreign Exchange and Foreign
Trade Control Law Article 25
Foreign Exchange and Foreign Trade Control Law Article 25
Provisions of Foreign Exchange Control Guidance
Ordinance Article 21 Section 1

Conditions:

Permit	Granted	Denied
Permit granted under following conditions		

Name seal of MITI Minister
Authority _____
(Name seal) _____

Table 1 of Export Trade Control Ordinance

<u>Goods</u>	<u>Area</u>
<p>4 Semifabricated or primary production of nonferrous metals and metals of their alloys, including those corresponding to any of the following--</p> <p>a) Metals of beryl or beryllium alloys whose beryllium content is 50 percent or more by weight; semifabricated or primary products (hereafter called "basic metals" in this section)</p> <p>b) Metals of metallic boron</p> <p>c) Titanium alloys with aluminum, zirconium, molybdenum and tin in which the titanium content is respectively 6 percent, 4 percent, 6 percent, 2 percent and 82 percent by weight, as well as metals whose aluminum content is 12 percent or more by weight</p> <p>d) Cobalt alloys in which the cobalt content exceeds 50 percent by weight, and metals corresponding to any of the following--</p> <p>(1) Those whose tantalum content exceeds 5 percent by weight</p> <p>(2) Those of the dispersion-strengthened type whose aluminum oxide, yttrium oxide, zirconium oxide, cerium oxide and thorium oxide content exceeds 1 percent by weight</p> <p>(3) Those whose content of scandium, yttrium, lanthanum, cerium, praseodymium or neodymium is 0.05 percent or more by weight</p> <p>e) Nickel alloys whose nickel content is more than 50 percent by weight, and metals corresponding to any of the following--</p> <p>(1) Those wherein the combined content of aluminum and titanium exceeds 11 percent by weight</p> <p>(2) Dispersion-strengthened ones whose content of aluminum oxide, yttrium oxide, zirconium oxide, lanthanum oxide, cerium oxide or thorium oxide exceeds 1 percent by weight</p>	Area A

(3) Those whose content of scandium, yttrium, lanthanum, cerium, praseodymium or neodymium is 0.05 percent or more by weight

f) Niobium alloys that are metals whose niobium content or combined niobium and tantalum content is 60 percent or more by weight

g) Molybdenum alloys whose molybdenum content is 97.5 percent or more weight (except wire)

h) Metals which are hafnium or hafnium alloys whose hafnium content exceeds 60 percent by weight

i) Metals which are tantalum of 99.98 percent purity or more, or which are tantalum alloys with a tantalum content of 60 percent or more by weight.

5 Metals of lithium, zirconium and zirconium alloys; metals which are semifabricated goods and primary products, and lithium alloys corresponding to any of the following-- All areas

a) Those in which the ratio of lithium 6 to lithium 7 exceeds that of the natural mixture

b) Those whose lithium content exceeds 50 percent by weight

7 Monocrystalline silicons corresponding to any of the following as well as to epitaxially grown silicon crystals, crystals making up the insulating boards of single crystals of substances other than silicon, and polycrystalline silicon for semiconductors. Area A

a) Those in which the substrate concentration of gallium, selenium, indium, thallium and bismuth exceeds $10^{16}/\text{cm}^3$ but is less than $10^{18}/\text{cm}^3$

b) Those in which the substrate concentration of arsenic exceeds $10^{16}/\text{cm}^3$ but is less than $10^{18}/\text{cm}^3$

c) Those of the P-type having an electrical resistance in a cross-sectional area of 1 cm^2 and 1 cm length (hereafter called in this item "unit of electrical resistance") of 5,000 ohms or more; those wherein the crystal's 3 axial vectors are at right angles and are respectively 1-1-1, and the unit electrical resistance is 100 ohms or less; and those wherein the crystal's 3 axial vectors are at right angles and are respectively 1-0-0 with a unit electrical resistance of 100 ohms or less

- d) Those of the N-type wherein the unit electrical resistance is 50 ohms or less
- 7-2 Crystals from which are fabricated insulation boards of monocrystalline gallium compounds (except those whose gallium content is 1 percent or less by weight); monocrystals of indium compounds (except those whose indium content is 1 percent or less by weight); and epitaxially grown monocrystals of these compounds and substances other than the said compounds. Monocrystals of gallium phosphide and monocrystalline gallium compounds that corresponding to a) through e) below are excluded, however. Area A
- a) Those which are wafers (including those of epitaxially grown crystals) of gallium nitrate and gallium-arsenic-phosphorus
- b) Those doped by the diffusion method using silicon, sulfur, zinc, selenium, tin and tellurium
- c) Those in which the dislocation density exceeds 10,000 units/cm²
- d) Those whose carrier concentration exceeds 10¹⁶/cm³
- e) Those in which the carrier mobility is up to 2,000 cm²/volt/second
- 8 Compounds of cadmium, tellurium and mercury Area A
- 9 Semifabricated items and primary products of steel alloy whose molybdenum content is 10 percent or more by weight or whose chromium content exceeds 14 percent by weight and molybdenum content exceeds 5 percent by weight (except those made from castings and having a carbon content over 1.5 percent by weight) Area A
- 10 Nickel powder with particulate diameters up to 5 microns, porous metals made by using such nickel and having pores of 25-micron diameter or less Area A
- 12 Magnetic metal substances--sheet with a thickness of 0.1mm or less; those with initial magnetic permeability of 120,000 or more; those with a remanence at a maximum of 98.5 percent or more; those creating magnetic energy above 10 million gauss-Oersteds; those creating a magnetic energy of 4.85 million gauss-Oersteds or more; and those in which the coercive force is 1,800 Oersteds or more; and steel plate having copper pressure-bonded to it Area A

- 17 Scrap titanium alloy listed under c) of item 4, scrap niobium alloy listed under f) of the same item, and scrap of tantalum alloy listed under i) of the same item Area A
- 18 Artificial graphite with an apparent specific gravity at a temperature of 15.5 degrees Centigrade of 1.90 or more (except that listed in item 19) Area A
- 19 Artificial graphite in which the boron content is up to 5 parts per million by weight and the apparent specific gravity at 15.5 degrees Centigrade exceeds 1.50 (limited to that shaped for use in atomic reactors) Area A
- 21 Quartz oscillators corresponding to any of the following, or to their semifabricated products-- Area A
- a) Those for filters having a usable temperature range exceeding 125 degrees C., and those using the trapped energy phenomenon
 - b) Those used for oscillators in which the average aging rate is within ± 0.000001 percent/24 hours; those designed for use in a constant temperature container; and those designed for the quartz oscillators listed in a) of item 22
- 22 Oscillators corresponding to any of the following and parts for the laser oscillators listed in c)-- Area A
- a) Those which are quartz oscillators having a device for rectifying the effects of temperature changes, those for which the operating temperature range exceeds 120 degrees, and those for which the allowable variations in frequencies at the operating temperature range are up to 0.00015 percent
 - b) Those of the electronic type which have an oscillator with a smaller frequency than the tunable frequencies
 - (1) Those designed to operate at frequencies above 550 megahertz
 - (2) Those wherein the ratio of the phased noise to the signal wave is up to -60 decibels, or the ratio of AM noise to the signal wave is up to -70 decibels at a 30,000-hertz bandwidth centered on the signal wave (except 1 hertz bandwidths centered on the signal wave)

- (3) Those requiring up to 10 milliseconds for frequency switching
- (4) Those whose ratio of spurious components in the high-frequency wave to the signal is up to -60 decibels and those whose ratio of spurious components in the nonhigh frequency wave to the signal is up to -60 decibels
- (5) Those whose stability when transmitting continuously for over 24 hours is 0.00000001 percent or more

c) Laser oscillators. Those corresponding to any of the following are excluded--

- (1) Those that are argon laser oscillators designed to operate at wavelengths of 0.8 microns or less, krypton laser oscillators or tunable CW dye laser oscillators which generate a continuous wave and so have a maximum rated output not over 20 watts, or which generate a pulse not over 0.5 Joules per pulse and so have an average output of 20 watts or less
- (2) Those which are helium-cadmium laser oscillators designed for use at wavelengths of 0.8 microns or less, nitrogen laser oscillators, or multigas laser oscillators (except helium-cadmium laser oscillators, helium-neon oscillators and CO-CO₂ oscillators) generating a continuous wave and having a maximum rated output of 120 watts or less, or generating a pulse of 0.5 Joules or less per pulse and having an average output of 120 watts or less
- (3) Those which are helium-neon oscillators designed to operate at wavelengths of 0.8 microns or less
- (4) Those which are ruby laser oscillators designed to operate at wavelengths of 0.8 microns or less and which which generate a pulse of 20 Joules or less per pulse
- (5) Those which are CO laser oscillators, CO₂ laser oscillators of CO-CO₂ laser oscillators generating pulses of 20 Joules or less per pulse and correspond to any of the following--
 - 1. Those designed for use at a wavelength range of 5-7 microns, generating a continuous wave and having a maximum rated output of 50 watts or less
 - 2. Those designed for use at a wavelength range of 9-11 microns, generating a continuous wave and

having a maximum rated output of 2,500 watts or less; those generating a pulse of 2 Joules or less per pulse and having an average output of 1,200 watts or less

- (6) Those which are YAZ laser oscillators designed for use at 1.06 micron wavelength and corresponding to any of the following--
 - 1. Those that generate a continuous wave and have a maximum rated output of 50 watts or less
 - 2. Those that generate a pulse of only 0.5 Joules or less per pulse and have an average output of 10 watts or less
 - 3. Those that generate a pulse of 10 Joules or less and have a pulse of 50 microseconds or more and an average output not over 50 watts
- (7) Those which are glass laser oscillators designed for use at 1.06 microns wavelength and generate a pulse of not more than 0.5 Joules per pulse
- (8) Those which are tunable CW dye laser oscillators designed to operate at up to 0.8 micron wavelength, generate a continuous wave and have a maximum rated output of 1 watt or less
- (9) Those which are tunable CW dye pulse laser oscillators designed to operate at up to 0.8 micron wavelength (except argon laser oscillators and krypton laser oscillators), have a maximum continuous time for the pulse width of 100 nanoseconds or less, and have a peak output of 1,000 kW or less
- (10) Those which are semiconductor laser oscillators made from a single element and are designed for use at wavelengths up to 1 micron; and those for use with price-code scanners, with image or voice recording devices or with reproduction devices

25

Synthetic lubricating oils and greases of polyphenyl ethers or thio-ethers containing monameric and polymeric forms of perfluoro-triazines, perfluoro-aromatic ethers, perfluoro-aromatic esters, aliphatic esters, or groups of four or more phenyls, or groups of alkylphenyls, or that have these as their main ingredients

Area A

- 27 Petroleum-group mineral oils, synthetic hydrogen carbide oils, or hydraulic oils with these as their main ingredients, and which have a pour point of -34 degrees C. or less and stability at 343 degrees C. Area A
- 31 Buoyancy materials usable at water depths greater than 1,000 meters, or with a specific gravity of 0.561 or less Area A
- 32 Synthetic rubber containing fluorine (including organic intermediates with a combined fluorine content not less than 10 percent by weight); polymers of butadiene and acrylic acid; polymers of butadiene, acrylonitrile and acrylic acid (including homologues); polysulfurated fluid polymers with a molecular weight of 1,200 or less and a viscosity not over 2,000 centipoise; polybutadiene terminated by a carboxyl, hydroxyl or thiol; and polyisoprene and polyisobutylene terminated by a carboxyl Area A
- 42 Fluorinated silicon fluids and silicon resin greases for lubrication and are usable above 180 degrees C. and have a drop point of 220 degrees C. or above Area A
- 42-2 Glass fibers and carbon fibers having a measured index of relative elasticity at 23 degrees exceeding 125 million, and a specific tensile strength exceeding 3 million; those with a relative elasticity above 100 million in an inert environment, and a sublimation temperature above 1,649 degrees (except carbon fibers with a relative elasticity up to 200 million and a specific tensile strength up to 1 million); and twine, roping, tape, cloth, throw rugs, blankets and shaped items using these (limited to special shaped items manufactured using the machinery listed in Item 101) Area A
- 43 Polychlorotrifluoroethylene metamerized into oil or wax; copolymers of polybromotrifluoroethylene and dibromotetrafluorethane (except those with a purity of 99.8 percent or less and having in each 100 millimeters 25 or more impurity particles with granules having a diameter of 200 microns or more; perfluoro-alkylamine, tetrafluoroethylene chlorotrifluoropropylene vinylidene fluoride, hexafluoropropylene and promotrifluoroethylene (except copolymers of tetrafluoroethylene and hexafluoropropylene); terpolymers (called "tetrafluoroethylene's copolymer" in b) and c) of Item 83 and in Items 116 and 136 c); as well as greases, lubricants and fluids for electrical conduction or vibration damping using any of these substances Area A

- 44 Polyimides (except their congealed forms), polybenzimidazole, polyimidazopyrrolene, aromatic polyamide, polybaraxylene, polyphenylene sulfide, polyquinoxaline, polybenzo-thiozole, polyoxadiazole, polytriazole, polythiozole, polyphosphanitrile, polybenzimidazole-phenatrolene, polypyrazine, polyspirane, polysilozane, polyperfluorotriazine, polysilsequioxan ladders, poly-parabenzoquinone ladders and products thereof (except products made from polyimide and in strip form with a thickness of 0.254mm or less; and aromatic polyamide fibers and threads with a relative modulus of 250 grams or less per denier and a tensile response strength of 11 grams or less per denier; and products using these) Area A
- 46 Boron, fluorine, hydrogen peroxide, ammonium perchlorate nitrogen tetroxide, guanidine nitrate, guanidine perchlorate, hydrazine, hydrazine nitrate, hydrazine perchlorate, monomethyl hydrazine, dimethylhydrazine, chlorine trifluoride, beryllium compounds, boron compounds, zirconium compounds (limited to those whose hafnium content is up to 1/500th of the zirconium content), niobium compounds, hafnium compounds, tantalum compounds and boron admixtures Area A
- 47 Beryllium compounds, semifabricated items and primary products of the zirconium and hafnium compounds listed in Item 46 (except semifabricated and primary products of beryllium oxides used in electronic equipment parts) Area A
- 48 Deuterium compounds and mixtures, tritium compounds and mixtures, lithium compounds and mixtures corresponding to any of the following, and deuterium and tritium Area A
- a) Items which are deuterium compounds or deuterium mixtures wherein the ratio of the deuterium's atomic number to the hydrogen's atomic number exceeds 1:5,000
- b) Tritium compounds or tritium mixtures wherein the ratio of the tritium's atomic number to the hydrogen's atomic number exceeds 1:1,000 (except those which are tritium mixtures and in which, should the tritium and hydrogen be separated, none would have a ratio of the tritium's atomic number to the hydrogen's atomic number that exceeded 1:1,000)
- c) Lithium compounds containing hydrogen, deuterium or lithium

- d) Lithium compounds or lithium mixtures wherein the ratio of lithium 6 to lithium 7 is higher than in the natural mixture
- 49 Nitroguanidine, guanidine perfluorate, ethylene-dinitramine, 2.2-dinitropropanol, bis (2.2-dinitropropyl) formal [methylal] bis (2.2-dinitropropyl) acetal, and 3-nitroso-1.5-pentan-di-isocyanate Area A
- 51 Nuclear fuel materials and nuclear raw materials All areas
- 54 Military-use aerial photographic equipment and accessories Area A
- 54-2 Photographic equipment designed for mounting on artificial satellites and other flight-frames used for space development Area A
- 54-3 Cameras for doing streak photography by operating a revolving reflector, and which can shoot a rate of 1 cm or more of film per microsecond Area A
- 55 Movie cameras (limited to those using film with widths of 8mm-90mm), and with a shooting speed of 13,150 frames/second or more; and optical equipment and electronic equipment that increases the shooting speed of movie cameras Area A
- 57 Cameras corresponding to any of the following Area A
- a) Those that, when shooting a frame whose picture height is 36mm, shoot faster than 1 million frames/second
- b) Those incorporating electron tubes that correspond to those listed in Item 153 a)
- 58 Camera shutters with a shutter speed of 50 nanoseconds or less, and the parts and accessories for them Area A
- 59 Photographic film corresponding to any of the following Area A
- a) Photographic film with a sensitivity of 10,000 [ASA] or more as measured by methods specified in No K7604 (Methods for finding and indicating ISO photosensitivity for graduated black-and-white negative film for still photography) in the Japan Industrial Standards [hereafter, "JIS"] based on the Industrial Standardization Law (1949 Laws No 185)

b) Those for color with a sensitivity to the wavelength spectrum above 720nm and up to 200 nanometers or less

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| 60 | Magnetometers that can measure magnetic densities up to 1 gamma, and their parts | Area A |
| 61 | Electronic computing devices that can analyze continuous input signals at intervals of 5 nanoseconds or less (1 nanosecond for those using a prescaler); those that can measure burst frequencies above 100 megahertz (limited to those with a continuous burst time of 5 milliseconds or less); and those that are digital type interval measuring devices that can measure single input signal times of 5 nanoseconds or less | Area A |
| 62 | Nuclear reactors, their spare parts and accessories; and devices designed for power generation or propulsion using nuclear reactors | All areas |
| 64 | Gravity meters, and their parts, designed for use on ships and aircraft | Area A |
| 66 | Neutron generators of the static electrical accelerator type using the nuclear reaction of tritium with deuterium, and designed to operate without use of a vacuum pump | Area A |
| 66-2 | Devices designed to separate or reprocess nuclear fuels irradiated by radiation, nuclear raw materials or lithium; and their parts and control devices | All areas |
| 67 | Environmental testing devices that can create pressures within 0.0001mm of a column of mercury | Area A |
| 71 | Construction machinery specially designed for airborne transport | Area A |
| 72 | Vibration testing equipment, acoustical test devices and their accessories corresponding to any of the following (except those analog-type accessories, electronic computers, electronic measuring devices, frequency analyzers or their parts and accessories, or instruments involved with automatic controls or their parts and accessories not covered among those listed in Items 61, 139, 141 and 174) | Area A |

a) Digitally controlled vibration tests and their accessories (except vibration generators with a thrust of up to 100 kiloNewtons, mechanical vibrators, pneumatic vibrators and vibration meters, and those listed in b))

b) Digitally controlled vibration meters with simulation functions and their accessories

c) Acoustical testing devices capable of producing sound pressures of 140 decibels or more at an audio-pressure of 20 micropulses held at 0 decibels; or those with a rated output of 4 kilowatts or more; and the accessories for the above

73	Wind tunnels and their parts and accessories	Area A
75	Facilities for manufacturing liquid hydrogen, having a daily production capacity of 1.5 tons or more	Area A
76	Facilities for manufacturing deuterium or deuterium compounds (including concentrating facilities), and their parts and accessories	All areas
77	Facilities for manufacturing liquid fluorine	Area A
78	Electrolytic vats for the manufacture of fluorine	Area A
79	Facilities for manufacturing military explosives, and their parts	All areas
80	Plants for manufacturing uranium hexafluoride, uranium isotope separation facilities, and their accessories and parts	All areas
81	Facilities for manufacturing uranium dioxide, lithium isotope separation facilities and facilities for shaping and processing nuclear fuel materials	All areas
82	Tritium manufacturing facilities	All areas
83	Valves, cocks, tubing and couplings corresponding to any of the following--	Area A

a) Valves or cocks that have all liquid-contact surfaces made of 90 percent or more titanium, zirconium or tantalum (except those whose tantalum content is 97 to 99.7 percent by weight. Also excluding check valves, no-return valves, float valves and pressure-regulating valves that operate at pressures up to 30kg/cm^2 , those used for milk machines or for home freezers)

b) Reinforced tubing or couplings made from granulars or powdered polymerized polytetrafluoroethylene, copolymerized tetrafluoroethylene, or manufactured by using copolymers of tetrafluoroethylene and hexafluoropropylene, and those designed for operation at pressures of 211 kg/cm^2 or more

c) Unreinforced tubing manufactured using copolymers of tetrafluoroethylene to line or clad tubing with an inner diameter of up to 28.5mm, and which shrinks upon heating

90	Pumps manufactured using for all surfaces in contact with liquids metals with a titanium, zirconium or tantalum content of 90 percent or more by weight (excluding those with a tantalum content of 97-99.7 percent by weight)	Area A
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91	Pumps used with molten metals	Area A
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93	Diffusion pumps with a maximum exhaust capacity for nitrogen above $50\text{m}^3/\text{second}$; turbo-molecular pumps with a maximum exhaust capacity for nitrogen above $2\text{m}^3/\text{second}$; and cryopumps usable below -200 degrees C.; and the parts, accessories and control devices for these	Area A
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94	Jacketed containers designed to store liquid fluorine	Area A
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96	Equipment designed for use at temperatures below -170 degrees C. and corresponding to any of the following	Area A
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a) Superconductive electromagnets generating a magnetic field with magnetic inductions of 3 teslas or more at current densities of $10,000\text{ amperes/cm}^2$ or more. However, those corresponding to any of the following are excluded--

- (1) Those requiring 1 minute or more to fully charge or discharge the magnetic field (except those designed for gyrotron use)

(2) Those not requiring 1 minute or more to charge or discharge their magnetic field, but corresponding to any of the following three

1. Those wound with wire, cable or tape using superconductive filaments of niobium-tantalum alloy
2. Those with an inner diameter of 6cm or less
3. Those wherein the maximum energy delivered per pulse divided by that pulse's duration does not exceed 500 kilo Joules/minute

b) Superconductive electrical equipment, except that corresponding to either of the following

- (1) Items used for electric power transmission and distribution
- (2) Items that are DC single pole generators having the single-pole armature made of materials other than superconductive ones and running in a magnetic field created by superconductive windings

c) Superconductive materials, excluding wire forms having a cross section of 0.0042mm^2 or more (0.00126mm^2 for those of niobium-tantalum alloy)

d) Memory or logic devices

e) Phase-slip devices

f) Cooling devices designed for mounting on vehicles, ships, aircraft or artificial satellites and other flight frames for space development

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|-----|---|--------|
| 98 | Consumable-electrode vacuum arc furnaces (limited to those in which the volume of a single charge exceeds 20 tons), and skull-type vacuum arc furnaces, and their parts and control devices | Area A |
| 99 | Metal rolling mills designed to roll metals whose melting point exceeds 1,900 degrees C., and their parts, accessories, control devices and testing equipment | Area A |
| 101 | Machines for manufacturing fiberglass or carbon-fiber shaped products and capable of correlating and controlling | Area A |

the revolutions of three or more axes (two axes if they are items designed for manufacturing shaped products for rockets or aircraft), and their parts, accessories and control devices

104 Turning machines, and their parts, corresponding to any of the following-- Area A

a) Lathes for finishing mirror surfaces, using diamond bits and corresponding to any of the following (1) to (3)

- (1) Those whose positioning precision measured by methods prescribed by No 2.2 of JIS B6331 (Numerically controlled lathe testing and inspection methods) is up to 0.0005mm per 300mm of travel, and those whose repeatability precision as measured by No 3.4 of the same JIS B6331 is up to ± 0.000125 mm per 300mm of travel
- (2) Those whose shimmy oscillation on the spindle's axial plane and radial plane is up to 0.0004mm when the spindle makes a full revolution
- (3) Those whose straightness of motion as measured by the method prescribed by No 4.2 of JIS B6201 (General provisions on methods for testing machine tools) is within 2 seconds of arc, and whose angular motion as measured by the method prescribed in No 4.5 of the same JIS B6201 is within 0.001mm per 300mm of travel

b) Parts for lathes for finishing mirror surfaces, and corresponding to any of the following--

- (1) Assembly parts for spindles and shaft bearings giving a spindle shimmy on the axial plane and radial plane within 0.0008mm for a full revolution of the spindle
- (2) Linear-induction motors corresponding to any of the following--
 1. Those whose stroke exceeds 200mm
 2. Those whose nominal propulsive force rating exceeds 45 Newtons
 3. Those whose minimum incremental movement is within 0.001mm
- (3) Diamond bits having a tool-cutting radius of 0.1mm to 5mm and a true circularity within 0.002mm

105 Linear voltage differential transformers, and angular measuring devices using linear measuring devices and their parts, corresponding to any of the following-- Area A

- a) Contact-type linear measuring devices that can only make measurements in ranges under 5mm, and whose drift at temperatures between 19-21 degrees C. is 0.1 percent or less in 24 hours
- b) Noncontact type linear measuring devices with probes of an effective measuring diameter up to 0.5mm and a drift in 24 hours within 0.5 percent at temperatures between 19-21 degrees
- c) Linear measuring devices that can measure on two or more axes, that have a measurable range exceeding 200mm for any axis, and that have an accuracy within 0.0008mm per 300mm of travel
- d) Linear voltage differential transformers used as parts for linear measuring devices and lacking compensating networks, and capable only of measuring lengths up to 5mm
- e) Angular measuring devices with an accuracy to 1 second of arc or less

106 Gear-wheel cutting or grinding lathes and gear-wheel finishing machines corresponding to any of the following Area A

- a) Items for manufacturing bevel gears and corresponding to any of the following--
 - (1) Shaped-form bevel gear grinding machines
 - (2) Bevel gears whose modules are up to 0.5mm and which can make items with 0 Grade precision as stipulated by JIS B1704 (Precision of bevel gears)
 - (3) Gear wheels whose modules are 0.5mm or more, and items capable of making products of 0 Grade precision as stipulated in MITI ministerial notifications on JIS B1704
- b) Items which can make flat gears whose precision as stipulated in JIS B1702 (Precision of spur gearing and helical gears) is 0 Grade, helical gears (including double helical gears), and racks that can make items as stipulated in the MITI ministerial notifications

- 107 Machine tools specifically for gas turbine blades, and their accessories Area A
- 108 Machine tools designed for making aircraft gas turbine engines, devices designed for their testing, and items that correspond to any of the following Area A
- a) Compressors, lathes for making turbine discs, and broaching machines
 - b) Grinding machines for making rotors
 - c) Computer-controlled items for inspection machines for compressor or turbine discs
- 109 Machine tools, processing tools, testing devices and their accessories, which are specifically for use with military arms All areas
- 110 Machine tools specifically for aircraft materials Area A
- 111 Presses corresponding to any of the following, and their parts and accessories Area A
- a) Isostatic presses corresponding to any of the following--
 - (1) Those whose maximum pressure is 1406 kg/cm^2 or more and which have a chamber whose inner diameter is 40cm or more
 - (2) Those whose maximum pressure is 351 kg/cm^2 or more and in which thermal control is possible for their chamber (except those with a chamber with an inner diameter of 12 cm or less and usable only at temperatures of -35 to $+80$ degrees C.)
 - b) Those designed for processing materials with a melting point above 1900 degrees C.
 - c) Hydraulic presses whose nominal compression exceeds 10,000 tons (5,000 tons for horizontal types)
- 113 Spin-forming and flow-forming machines of the double support or 3-roller type; those of the horizontal spindle type powered by a drive motor of 59 kW or more; those with a vertical spindle powered by a motor of 37 kW or more Area A

114 Machine tools specifically for aircraft materials

Area A

115 Equipment that measures metal-working machines that do shaping and are designed for linkage to the numerically controlled equipment listed in Item 115-2, their parts and accessories, corresponding to any of the following--

Area A

a) Boring mills, milling machines and machining centers corresponding to any of the following

- (1) Those with 2 or more spindle heads
- (2) Those capable of control simultaneously on four or more axes
- (3) Those in which the maximum slide travel in any axis exceeds 3,000mm
- (4) Those in which the positioning accuracy measured by the method set forth in No 3.3 of JIS B6331 is 0.01mm or less per 300mm of travel
- (5) Those in which the power of the electric motor coupled to the spindle exceeds 20 kW
- (6) Those in which the shimmy in the spindle's axial plane and radial plane is within 0.002 percent of the spindle's diameter

b) Metal-working machines other than boring mills, milling machines and machinery centers, and corresponding to any of the following

- (1) Those on which the number of simultaneously controllable axes is four or more
- (2) Those in which the positioning accuracy as measured by the method set forth in No 3.3 of JIS B6331 is within 0.01mm per 300mm of travel
- (3) Those in which the shimmy on the spindle's radial axis plane is within 0.008mm per revolution

c) Parts and accessories for the machine tools in a), or the dimensional measuring equipment in b), but excluding those corresponding to any of the following--

- (1) Those which are lead screws with an accuracy at or above the figure derived by adding 0.0025mm to 0.0005 percent of the effective length of the threaded part-- i.e., at or above 0.004mm per 300mm; and those wherein

the per-revolution shimmy between the screw's bearing surface and the threaded part's center line at a point 3 times the length of the screw diameter in another dimension from the bearing area is 0.005mm or more

- (2) Those which are feedback units for positioning inspection, wherein the accuracy of the said positioning inspection devices is 2 seconds or more of arc for those checking angles, and, for those checking distance, at least the value obtained by adding 0.00015mm to 0.0002 percent of the effective length of the dimension locator scale (For those with a scale having an effective length of 100mm or less, the value obtained by adding 0.0004mm to 0.00013 percent of that length)
- (3) Linear-induction motors corresponding to any of the following--
 1. Those with a stroke of not more than 200mm
 2. Those whose force rating is not more than 45 Newtons
 3. Those with a minimum incremental motion of at least 0.001mm

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| 115-2 | Numerically controlled equipment that controls metal working machines or devices for measuring the shape of objects by the contour-control method, and their accessories (Except those of the hardwired type with two axes simultaneously controllable and having a minimum increment of 0.001mm or more and lack interfaces enabling direct inputs from electronic computers) | Area A |
| 116 | Extrusion-shaping machines for tetrafluoroethylene copolymers, and their parts | Area A |
| 117 | Continuous magnetic-powder coating devices designed for manufacturing polyester-base magnetic tape and corresponding to the recording media listed in Item 168 (including those stipulated by the notification in the same Item), their parts, the magnetic-powder coating equipment designed to manufacture those listed in the same item which are recording media other than magnetic tape (including those stipulated in the notification in the same item), the automated equipment, parts, test devices and control devices for monitoring, grading and testing | Area A |

- 118 Closed-system liquid-cooled electric motors of the reversing type with an output not less than 750 kW Area A
- 119 Fuel cells and solar batteries operating at 200 degrees C. or less; those which in tests using a tungsten light source have an output of 14 milliwatts [mW] when exposed to 100 mW/cm² illumination (4 mW for those using gallium arsenide); those with an output of 450 mW when exposed to 10 W illumination per cm² in tests using silicon-carbide light sources; those which are primary cells operable even if left for 10 years or more; those usable at temperatures above 55 degrees C. and below -25 degrees C.; those using electrolytes of soluble salts and operating at 150 degrees C. or less; electronically powered batteries; and the parts for these Area A
- 119-2 Diesel engines which have an output of at least 36 kW and up to 75 percent of their parts by weight made of nonmagnetic materials, or which are diesel engines of at least 1100 kW output and run at 700 rpm or more Area A
- 120 Airborne and ground communication equipment corresponding to any of the following, and their parts and accessories-- Area A
- a) Those designed to operate at frequencies greater than 156 MHz
 - b) Those with 200 or more automatically tunable channels
 - c) Those that switch channels within 10 milliseconds
 - d) Those that switch frequencies digitally
 - e) Those sealed against the effects of changes in air pressure
 - f) Those continually operable at temperatures between +55 and -55 degrees C.
- 121 Airborne and ground radio navigational equipment (except direction finders), and direction-finding equipment designed to be operable at frequencies greater than 30 MHz (5 MHz for those used on aircraft), and their parts, accessories, testing devices and simulator equipment for training purposes Area A

- 122 Airborne and ground radar corresponding to any of the following, their parts (except phased-array antennas designed to operate at frequencies below 1 gigahertz [GHz], and their parts), accessories, test devices and simulator equipment for training Area A
- a) Those designed to operate in the frequency ranges of 0.01-0.014 MHz, 420-450 MHz, 890-942 MHz, 1215-1400 MHz, 2300-2500 MHz, 2700-3600 MHz, 5350-5850 MHz and 8500-10500 MHz
 - b) Those whose peak output from the transmitter is 500 kW or more (2,500 kW for those with a maximum design frequency of 1,500 MHz; 1,500 kW for those from 1,500 to 3,500 MHz; and 1,000 kW for those from 3,500 MHz to 6,000 MHz)
 - c) Those with a detection probability of 80 percent or more for targets of 10m at a distance of 100 NM from the radar (250 NM for those designed to operate at frequencies up through 3,500 MHz)
 - d) Those not of the pulse modulating type that can return a pulse in a fixed cycle
 - e) Those having frequency-switching devices
 - f) Those using the Doppler effect
 - g) Those using signal-processing technology
- 122-2 Gyrocompasses (for those used on vessels listed in Item 174, limited to those with the capacity for detecting slant angles, gyro-astrocompasses and gyroscopes and their parts (except those used on vessels listed in Item 175)) Area A
- 123 Communication equipment using infrared or ultraviolet light (including detecting devices using infrared and ultraviolet light) and their parts Area A
- 125 Ultrasonic communication equipment (for underwater ultrasonic communication devices of the AM type used at frequency ranges of 40-60 KHz, excluding those with a range of less than 500 meters or output below 1 watt), and ultrasonic detection equipment and its parts
- 126 Wireless communication jamming equipment and its parts Area A

Underwater detection equipment using sound waves (including ultrasonic waves and those for underground detection but also designed to be operable underwater), and their parts. However, those corresponding to any of the following, or their parts, are excluded

Area A

a) Devices with a communication function and corresponding to any of the following--

- (1) Depth sounders or fish finders only usable in a vertical direction
 - (2) Position-fixing equipment usable in a horizontal direction and corresponding to the following 1-5
 1. Those with a transmitting frequency of 15 KHz or more
 2. Those whose operating frequency range is 15-30 KHz, which have a sound-pressure level up through 250 decibels when the sound pressure at 1 meter from a sound source is 0 decibels for 1 micropulse; and those with an operating frequency of 30 KHz or more
 3. Those with a transmitting amplitude up to ± 10 percent of the designed center frequencies
 4. Those designed only to operate at water depths not exceeding 1,000 meters
 5. Those with a display range not over 5,000 meters
 - (3) Electronic noise-generating devices usable only in a vertical direction
 - (4) Mechanical noise devices
 - (5) Chemical noise devices
- b) Acoustical hydrophones having only a receiving capability or electric acoustical transducers corresponding to any of the following (1)-(3)
- (1) Those incorporating piezoelectrical ceramics or crystal responder elements, having a sound-pressure sensitivity not over -192 decibels when set at 0 decibels with 1 volt per micropascal
 - (2) Those designed to operate only at water depths up to 100 meters
 - (3) Those not usable as towed hydrophone arrays

128 Wireless receivers corresponding to any of the following Area A
and their parts and accessories

- a) Panoramic types
- b) Digitally controlled types having a frequency switching time up to 10 milliseconds
- c) Frequency-spread modulating types having a transmitting bandwidth at least 100 times greater than the amplitude of one information channel, and capable of receiving signals at frequencies higher than 50 KHz

129 Wireless transmitters corresponding to any of the following Area A
and their parts and accessories

- a) Those designed to be usable at frequencies over 960 KHz
- b) Pulse-modulating types
- c) Those usable at temperatures above +60 degrees and below -40 degrees C.
- d) Those of the frequency-spread modifying type having a transmitting bandwidth at least 100 times greater than one information channel, and capable of sending signals at frequencies beyond 50 KHz

129-2 Wireless transmitters using electronic exciters, having Area A
fewer oscillators than the number of tunable frequencies, and corresponding to any of the following, their parts and accessories

- a) Those designed to be usable at frequencies of 32 MHz or less, having frequency resolutions up to 10 Hertz and a channel-switching time of 10 milliseconds or less
- b) Those designed to be usable at a frequency range of 32-235 MHz, having a frequency resolution up to 250 Hertz and a channel-switching time of 10 milliseconds or less
- c) Those designed to be usable at frequencies beyond 235 MHz. However, those corresponding to any of the following are excluded.
 - (1) FM types designed for use at a frequency range of 420-470 MHz; those of the AM type for land-mobile use and having a frequency resolution of 6.25 KHz or better, an output of 50 W or less for the mobile station types or 300 W or less for the fixed-station types, and a channel-switching time beyond 50 milliseconds

(2) Those for television broadcasting designed for use at a frequency range of 470-960 MHz, having a frequency resolution of 1 KHz or better and use manual switching synthesizers (limited to those designed for use at frequencies of 120 MHz or less)

d) Those that can transmit four or more frequencies simultaneously

e) Those of the pulse modulating type

130 Aviation or military wireless telemetering devices, and wireless remote control devices Area A

131 Wireless relay devices designed to be operable at frequencies of 960 MHz or higher, and their parts and accessories Area A

134 Communication transmission devices and their test equipment corresponding to any of the following, and their parts and accessories (except those that are photoconnectors and have a junction loss of 0.5 decibels or more) Area A

a) Analog transmission types using an analog signal for input and output power and designed to be usable at frequencies exceeding 19 MHz (0.3 MHz for those for submarine cable use)

b) Digital transmission types using an analog signal for output and input power; those designed to be usable at transmission speeds exceeding 2.1 MHz/second, and their testing devices

c) Those that are data-transmitting digital transmission type designed to be usable at transmission speeds exceeding 4,800 bits/second; or those of the automatic error detection-and-correction type not requiring retransmission; and those designed to be usable at transmission speeds exceeding 300 bits

136 Electric wire, cable and parts corresponding to any of the following-- Area A

a) Communication cable and parts corresponding to any of the following--

(1) That with two-layered cladding (limited to that applied at mutually opposed directions) used in towing

or suspending submerged devices and for communicating with those devices

(2) Those used for sea-bottom installations and either without cladding or having a single cladding layer, and which suffers attenuation of 0.97 decibels/km measured at a frequency of 1,600 KHz

(3) Coaxial types separated by a space, with the outer conductor having an inner diameter of 14 mm or more

(4) Optical fiber cable and its parts, as stipulated in MITI ministerial notifications

(5) That for preventing wiretapping

b) Noncommunication coaxial cable using metal plating on the dielectric part of the outer conducting wire

c) Cable or electric wire using tetrafluoroethylene copolymer for insulation or cladding

137 Cryptographic equipment

Area A

138 Flatbed type microdensitometers (except those using cathode rays) corresponding to any of the following and their parts

Area A

a) Those with a scanning speed above 5,000 points/second

b) Those for which the sum of the density resolution capacity expressed by using photo density (meaning that stipulated in No 2.1 of JIS K7605 [Method for measuring photo density]; hereafter the same in this time) and the spatial resolution capacity expressed in microns is 0.1 or less

c) Those for which the measurable density exceeds a photo density of 4

139 Electronic measuring instruments corresponding to any of the following--

Area A

a) Those having random access memory elements whose computing and memory capacities exceed 8,192 bits and are reprogrammable

- b) Those operable by programs and designed to be usable at frequencies beyond 1,000 MHz
- c) Those using oscillators and having a stability of 0.000001 percent when excited continuously for over 24 hours
- d) Those designed to be operable at frequencies beyond 18,000 MHz (12,500 MHz with comb frequency generators, transfer oscillators and frequency converters; and 1,000 MHz for direct impedance measuring devices, microwave receivers that can measure amplitude and phase simultaneously, and automatic measuring instruments for equivalent-circuit parameters spanning specified frequency ranges)
- e) Digital voltmeters that have a reading speed faster than 25 times/second (including instruments that can measure conditions other than voltage, using voltage changes), and those stipulated in MITI ministerial notifications
- f) Wave-form memory devices using analog-digital conversion techniques, and those that can do sequential sampling of single input signals at intervals of 50 nanoseconds or less
- g) Programmable measuring instruments for digital network inspection (except those stipulated in MITI ministerial notifications)
- h) Development-support devices designed for developing microprocessors assembled together with machines or other equipment, and for developing microcomputer programs

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|-------|---|--------|
| 140 | Frequency standard equipment having a stability of 0.00000001 percent or better when run continuously for over 24 hours | Area A |
| 140-2 | Inspection and measuring devices usable at temperatures above +55 degrees and below -25 degrees C. | Area A |
| 140-3 | Frequency synthesizers and signal generators using electronic exciters having fewer oscillators than the number of tunable frequencies, and corresponding to any of the following and their parts and accessories | Area A |
- a) Those designed to be usable at frequencies beyond 500 MHz

b) Those having a ratio of phase noise to signal up to -60 decibels with the 30,000 Hertz band centered on the signal, or a ratio of AM noise to signal up to -70 decibels

c) Those operable from programs and those with a frequency switching time up to 10 milliseconds

d) Those whose ratio of harmonic spurious components to the signal is up to -60 decibels, and those whose ratio of nonharmonic spurious components to the signal is up to -80 decibels

e) Those that can generate four or more frequencies simultaneously

f) Those of the pulse modulating type

g) Those using exciters whose stability when operated continuously for 24 hours or more is 0.00000001 percent or better

h) Those using the quartz oscillators listed in Item 22

141 Frequency analyzers corresponding to any of the following, Area A
their parts and accessories

a) Those using time-compression technology for the input signal, and those using high-speed Fourier conversion technology

b) Those with random-access memory elements whose program capacity and memory exceed 8,192 bits and are reprogrammable

c) Those with a display bandwidth of more than 125 MHz

d) Those in which the ratio of the measurable signal's minimum power to its maximum power exceeds 80 decibels

e) Those operable by programs, those having a scanning preselector, those using a tracking-signal generator, and those designed to be usable at frequencies beyond 1,000 MHz

f) Those designed to be usable at frequencies beyond 12,500 MHz

142 Microwave equipment designed for use at frequencies beyond Area A
1 GHz, their parts and accessories, and corresponding to any
of the following

a) Waveguides designed for use at frequencies beyond 18 GHz and their parts

- b) Waveguides whose bandwidth ratio exceeds 1.7
- c) Waveguides using magnetic properties
- d) Directional couplers whose bandwidth ratio exceeds 1.7 and whose directionality is 20 decibels or more
- e) Revolving connectors having two or more separate transmitting circuits and whose bandwidth exceeds 5 percent of the central frequency
- f) Filters designed to be usable at frequencies of 3 GHz or more
- g) Modulators using PIN diodes
- h) Accessories for waveguides using isolating bases functioning as dielectrics or integrated circuits that include active circuit elements

143 Amplifiers designed to be usable at frequencies beyond 1 GHz Area A

144 Amplifiers corresponding to any of the following, but excluding those for television broadcasting or for wire-
less communication at frequencies below 32 MHz Area A

a) Untuned amplifiers with a bandwidth exceeding 10 MHz, but excluding either of the following

- (1) Those with bandwidths below 50 MHz and output less than 20 W
- (2) Those whose bandwidth is 50-100 MHz and output is below 1 W

b) Tuned amplifiers whose bandwidth is 50 MHz, or 10 percent of the mean frequency

145 Signal processors using flexible waves and corresponding to any of the following and their parts Area A

a) Those using surface-flexible waves or simulated surface-flexible waves corresponding to either of the following

- (1) Those that can use frequencies beyond 400 MHz

(2) Those capable of using only frequencies below 400 MHz, and those stipulated in MITI ministerial notifications other than those for household electronic equipment or electronic equipment for entertainment

b) Those using bulk flexible waves and capable of using frequencies beyond 1,000 MHz

146 Condensers corresponding to any of the following-- Area A

a) Laminated magnetic condensers designed to be used above +125 degrees C. and below -55 degrees C.

b) Tantalum condensers designed to be usable above 125 degrees C. (excluding those of the sintered electrolytic type with casings made of epoxy resin, or sealed or coated by epoxy resin)

146-2 Pulse modulators that can generate impulses whose peak output exceeds 6 MW, impulses whose pulse width is 100 nanoseconds or less, or impulses whose impact coefficients exceed 0.002; and the pulse-transforming, pulse-forming and pulse-delay devices designed as parts for the above Area A

147 Cathode-ray tubes corresponding to any of the following Area A

a) Distributed deflection types (limited to those employing traveling waves)

b) Those whose raster number is 32/mm or more when measured by the shrinking raster measuring method

c) Those incorporating channel plates

148 Cool cathode tubes with three or more terminals, a rated peak anode voltage of 2,500 V or more, a rated peak amperage of 100 or more, an anode delay time of 10 microseconds or less, and a capacity to pass through an aperture with a 25.4 mm diameter Area A

149 Photosensitive components corresponding to any of the following, and their pellets and wafers Area A

a) Those having a maximum sensitivity at wavelengths under 190 and above 1,200 nanometers

b) Photo diodes or photo transistors whose response time constant is 250 nanoseconds or less

150

Semiconductor diodes (excluding those using germanium, selenium or copper oxide as their main material) corresponding to any of the following and their pellets and wafers

Area A

a) Those having the bulk effect and corresponding to any of the following--

(1) Those with a rated output frequency range above 1,000 MHz, those below 4,000 MHz, those with a peak output above 2 W, and those with a maximum continuous output above 0.2 W

(2) Those with a rated output frequency range of 4,000-12,500 MHz, a peak output above 1 W and a maximum continuous output above 0.1 W

b) Those having the characteristic of a capacitance that is varied by voltage, and having a rated input or output frequency above 1,000 MHz

c) Those having a maximum rated reverse recovery time up to 1 nanosecond (or 30 nanoseconds for those having a maximum rectified current exceeding 1 ampere)

d) Those whose rated input or output frequency exceeds 12,500 MHz (1,000 MHz for those other than the point-contact type used for mixing or for wave detection and in PIN diodes. For those used for mixing or wave detection other than the point-contact type, those stipulated in MITI ministerial notifications are excluded)

e) Those which are light-emitting diodes (excluding any corresponding to the parts for semiconductor laser generators listed in Item 22 c) 10, and those whose maximum wavelength created by radiant intensity exceeds 1,000 nanometers

150-2

Transistors corresponding to any of the following (except phototransistors), and their pellets and wafers

Area A

a) Those using silicon as their main material and corresponding to any of the following

(1) Those with an operating frequency above 1,000 MHz

(2) Those with a maximum collector dissipation above 250 W (300 W for those with an operating frequency below 1.5 MHz)

(3) Those whose operating frequency exceeds 200 MHz, and in which the product of the operating frequency expressed in MHz and the maximum collector dissipation expressed in watts exceeds 5,000

(4) Majority carrier types (except those of the electric field effect type designed for use with a maximum power dissipation of less than 0.5 W and a frequency under 1,000 MHz)

b) Those using something other than germanium or silicon as their main materials

150-3 Thyristors corresponding to any of the following, and their pellets and wafers

Area A

a) Those designed for use with pulse modulators and having a rated turn-on time of 1 microsecond or less when the rated peak current exceeds 150 amperes

b) Those with a rated turn-off time up to 1 microsecond

c) Those with a rated turn-off time of 1-2.3 microseconds, not sealed in a capsule with synthetic resin; and those with a rated peak current above 50 amperes

d) Those with a rated turn-off time of 2.3-10 microseconds and having a product for the repeat peak-off voltage expressed in kilovolts and the repeat peak-on current expressed in amperes that exceeds 25

151 Photomultiplier tubes corresponding to any of the following--

Area A

a) Those with maximum sensitivity at wavelengths below 300 nanometers and above 750 nanometers

b) Those with an anode-pulse time of 1 nanosecond or less

c) Those incorporating channel plates

152 Flash-discharge type X-ray equipment and X-ray tubes (except those with a peak power under 500 MW, those with an output voltage under 500 KV and those with a pulse width above 200 nanoseconds)

Area A

153 Image intensifier tubes, image converter tubes, camera and storage tubes corresponding to any of the following, and their parts Area A

a) Those that are image intensifier tubes (other than commercial X-ray amplifier tubes) and image converter tubes incorporating optical fiber face plates or channel plates

b) Camera tubes not incorporating optical fiber face plates (except those designed for use in television equipment for broadcast or commercial purposes) and corresponding to any of the following--

(1) Those using the image intensifier tubes or image converter tubes listed in a)

(2) Those incorporating channel plates

(3) Those where the tube's maximum length is less than five times its diameter

c) Camera tubes incorporating optical fiber face plates

d) Storage tubes (except image converter types designed for use in television equipment)

155 Electron-density modulator tubes corresponding to any of the following-- Area A

a) Those rated for continuous wave operation and corresponding to either of the following

(1) Those whose maximum frequency at the maximum rated anode dissipation is above 4 GHz

(2) Those usable at maximum frequencies in the range of 0.3-0.4 GHz at the maximum rated anode dissipation, and wherein the product of the maximum rated anode dissipation expressed in watts and the square of the maximum frequency expressed in GHz above 10,000 (20,000 for those designed for television transmission, operating in the frequency range of 0.47-0.96 GHz and not generating grid currents in their rated operating range)

b) Those rated for pulse operation and corresponding to either of the following

(1) Those with a maximum frequency at peak pulse output exceeding 1 GHz

- (2) Those usable at a frequency range of 0.3 GHz and wherein the product of the peak pulse output expressed in watts and the square of the maximum frequency expressed in GHz exceeds 45,000

156 Electron velocity modulator tubes, but excluding any that correspond to the following-- Area A

a) Pulse magnetrons of the fixed frequency type and variable frequency types corresponding to either of the following--

- (1) Those having a maximum rated peak output of 1.5 MW or less when operated at frequencies up to 3 GHz
- (2) Those wherein the product of the maximum rated peak output expressed in kW when operating in the frequency range of 3-12 GHz and the frequency expressed in GHz is 4,200 or less

b) Crossed-field amplifier tubes operating at frequencies only up to 4 GHz and having a maximum rated peak output of 1.2 MW or less and a power gain of 15 decibels or less

c) Continuous wave magnetrons of the fixed frequency type designed for medical use, industrial heating or for cooking and corresponding to either of the following

- (1) Those operating at frequency ranges of 2.325 GHz to 1.425 GHz or 2.4 GHz to 2.5 GHz and having a maximum rated output of 6 kW or less
- (2) Those operating at frequencies up to 1 GHz and having a maximum rated output of 25 kW or less

d) Klystrons, traveling wave tubes and oscillator tubes designed for operation at frequencies up to 20 GHz and having a maximum output of up to 3 W (except those usable without employing hot cathodes)

157 Electron tubes corresponding to any of the following Area A

a) Those that can tolerate momentary speeds above 9,800 meters/sec² (except fixed-voltage discharge tubes)

b) Those usable at ambient temperatures over 200 degrees C. (except fixed voltage discharge tubes)

c) Those getting output by causing a modulated electron beam to strike a semiconductor diode

- 159 Vacuum tubes that are pulse modulators for radar and have a rated peak anode voltage of 100 KV or more and a rated output of 6 MW or more Area A
- 161 Hydrogen thyratrons with a rated peak pulse output of 12.5 MW or more (limited to those using ceramic or metal assemblies for their casings)
- 161-2 Printed circuit boards and assemblies using these, and corresponding to any of the following-- Area A
- a) Printed circuit boards using insulating plates of paper base phenol resins, glass cloth melamine resin, glass epoxy resin, polyethylene terephthalate or other insulating materials (except those not usable continuously above 150 degrees C.)
 - b) Assemblies used for printed circuit boards, and corresponding to either of the following
 - (1) Those assembled with the printed circuit boards listed in a)
 - (2) Microprocessors, microcomputers, integrated circuits for memory or circuit elements corresponding to those listed in Items 150, 150-2 or 150-3, those assembled with the integrated circuits listed in Item 162 and those stipulated by MITI ministerial notifications (except those for power sources)
- 162 Integrated circuits, but excluding any corresponding to the following-- Area A
- a) Passive circuits enclosed in capsules
 - b) Those enclosed in capsules of metal or synthetic resins (except those designed to block the effects of radiation), and having a rated operating temperature in the range of -40 to +85 degrees C. (above -40 degrees for those listed in (9)), and--among those corresponding to any of the following--those stipulated in MITI ministerial notifications
 - (1) Bipolar types or CMOS types designed to operate as digital logic circuit elements
 - (2) Microcomputers using a single silicon chip and having a fixed program
 - (3) Silicon microprocessors

- (4) Those designed for memory elements
- (5) Those designed for electronic desk-top calculators
- (6) P-channel MOS types or N-channel MOS types designed for serial digital shift registers
- (7) Those for untuned AC amplification, for audible frequency amplification, for calculator amplification, isolation amplification or measurement amplification
- (8) Those for analog multiplication or division
- (9) Those for voltage rectification
- (10) Those for voltage comparison
- (11) Bipolar types designed to operate as electron control switches or threshold valve switches
- (12) Those for noncoherent light-emitting displays
- (13) Those incorporating a single photocoupler element
- (14) Those for interface use
- (15) Those for voltage-to-frequency conversion or for AC-to-DC voltage conversion
- (16) Those for analog-to-digital conversion or digital-to-analog conversion
- (17) Those designed to be nonreprogrammable
- (18) Those for timing

c) Those not encapsulated (except those designed to block the effects of radiation) and corresponding to any of the following which MITI ministerial notifications have stipulated

- (1) Bipolar types designed to operate as digital logic circuit elements
- (2) Those for calculation amplification or for audible frequency amplification
- (3) Those not reprogrammable

162-2 Magnetic materials, memory elements and switching elements, as well as the machines and equipment, parts, testing equipment and control devices for the manufacture of memory elements, switching elements and assembly parts such as may correspond to any of the following--

a) Magnetic materials, memory elements or switching elements corresponding to either of the following

(1) Magnetic materials manufactured from spiral, hexagonal or garnet type crystals and corresponding to either of the following--

1. Those of synthetic garnet monocrystals
2. Ferrite items stipulated in MITI ministerial notifications

(2) Memory elements and switching elements corresponding to any of the following--

1. Those of magnetic film
2. Magnetic bubble memory elements of monocrystalline or noncrystalline material
3. Those using magnetic moving domain
4. Those using cross-ties
5. Those of the single aperture or multi-aperture type and stipulated in MITI ministerial notices
6. Rod-form items stipulated in MITI ministerial notifications

b) Equipment and devices for manufacturing memory and switching elements or assemblies using these and corresponding to any of the following, their parts, testing devices or control devices

- (1) Automatic presses designed for manufacturing the single-aperture or multi-aperture memory elements and switching elements listed in a (2)5 (including those single-aperture devices stipulated in MITI ministerial notifications), their metal forms, or automatic equipment for their monitoring, grading or testing
- (2) Machines and devices for manufacturing magnetic film memory elements and switching elements having the characteristic of square hysteresis

- (3) Magnetic film switching elements and memory elements corresponding to any of these in a (2)2-4, and automatic monitoring and testing equipment designed for the manufacture of assemblies using switching elements
- 163 Thermoelectric materials having an index, obtained by multiplying their flux point expressed in Kelvin by their performance index, above 0.75; and the electrical power equipment using these, and their parts Area A
- 164 Materials for absorbing electrical waves of frequencies beyond 200 MHz, and corresponding to any of the following-- Area A
- a) Those with a tensile strength of 70 megaNewtons per meter² or more
 - b) Those with a compressive strength of 175 megaNewtons per meter² or more
 - c) Those usable at temperatures above 176 degrees C.
- 165 Electronic computers (except those for business use) and their accessory devices and parts Area A
- 167 Cathode-ray oscilloscopes corresponding to any of the following, their parts and accessories
- a) Those with a bandwidth exceeding 100 MHz
 - b) Cathode-ray tubes of the distributed deflection type (limited to those using delay lines), traveling wave differential type or items using those that incorporate channel plates
 - c) Those usable at temperatures above 55 degrees C. or below -25 degrees C.
 - d) Those capable of sampling to measure reflected wave shapes at frequencies above 1,000 MHz
 - e) Those capable of sequential sampling of input signals at intervals up to 50 nanoseconds
- 168 Recording and reproduction equipment, their parts, accessory image devices and recording media such as correspond to any of the following (except those stipulated by MITI ministerial notifications) Area A

a) Magnetic recording equipment or magnetic reproduction equipment (except that for voice or music, or those using a magnetic card with a magnetic surface area of 85 cm² or less as the recording medium), and the parts or recording media using these

b) Image or graphic recording equipment or reproduction equipment that uses electron beams or laser light (except recording equipment for television, reproduction equipment using recording discs, and facsimile equipment using laser (light), and its parts, accessory image equipment capable of continuous direct recording of sinusoidal waves above 20 KHz, and its parts

168-2 Equipment that applies lasers (except facsimile devices) Area A

170-2 Ball and roller bearings for precision machinery and corresponding to any of the following and their parts Area A

a) Those of precision Grade 4 as specified by JIS B1514 (Precision of rotating bearings), and corresponding to any of the following--

(1) Those other than ones of low carbon steel, high carbon chrome steel, nickel-chrome steel, nickel-molybdenum steel, nickel-chrome-molybdenum steel and chrome-molybdenum steel

(2) Those usable at temperatures above 150 degrees C.

(3) Others stipulated by MITI ministerial notifications

b) Separable, suspended types or intrawheel ones with an inner diameter of 10 mm or less, when they are of precision Grade 5 as stipulated by JIS B1514 and corresponding to a(1) or a(2)

171 Machinery for manufacturing the communication cable, and its parts, listed in Item 136(a) Area A

172 Machinery and equipment for manufacturing the components, integrated circuits and parts for electron tubes, semiconductor elements, flexible wave elements, film memory elements and printed circuit boards, as well as the monitoring and testing devices for these, and corresponding to any of the following-- Area A

a) Machines, equipment and parts designed for manufacturing switchover discharge tubes for the lasers listed in Item 122, or of the electron tubes corresponding to those listed in Items 147, 148, 151-153, 155-157, 159 or 161

b) The manufacturing equipment, monitoring or testing devices for semiconductor elements, flexible-wave elements, film memory elements (except those using magnetic materials), the assemblies using the printed circuit boards listed in Item 161-2 or the integrated circuits listed in Item 162, or their parts, as these correspond to any of the following

- (1) The precision manufacturing or processing equipment for semiconductor materials
- (2) Mask manufacturing equipment, mask inspecting equipment and equipment for transferring images onto the wafers
- (3) Digitally controlled inspecting equipment for processed wafers and pellets which use optical pattern comparison techniques or machine-scanning techniques
- (4) Digitally controlled equipment for testing the circuit functioning of processed wafers
- (5) Equipment for assembling integrated circuits
- (6) Testing equipment specified in MITI ministerial notifications and corresponding to either of the following--
 1. Semiconductor elements and noncapsulated pellets for test use, and those controlled by electronic computers
 2. Integrated circuits or assemblies using them for testing, and controlled by electronic computers

173 Masks and mask-plates for manufacturing the integrated circuits listed in Item 162

Area A

174 Automatically controlled and linked instruments that correspond to any of the following, their parts and test equipment

Area A

a) Synchros or resolvers corresponding to any of the following--

- (1) Those with a rated electrical error in their signal generators of 7 minutes of arc or less, and 0.2 percent of the maximum output voltage
- (2) Those whose rated dynamic error for receivers is 1 degree of arc or less
- (3) Those of the single-shaft type having three terminals or less
- (4) Those designed for use in gimbal equipment
- (5) Those designed to be usable above 125 degrees C. or below -55 degrees C. (hereafter in this Item this is called "the specified temperature range")

b) Analog-digital converters and digital-analog converters corresponding to any of the following--

- (1) Electrical input type analog-digital converters corresponding to any of the following--
 1. Those with a peak conversion rate exceeding 200,000 times/sec
 2. Those with a conversion error rate up to one part per 10,000 of the maximum measurable amount
 3. Those with a merit value of 100 million or more (maximum conversion speed expressed in times per second divided by the conversion error expressed by the ratio for the maximum measurable amount (hereafter, the same in this Item))
- (2) Electrical input type digital-analog converters corresponding to any of the following--
 1. Voltage input types with a conversion time up to 5 microseconds
 2. Ampere input type digital-analog converters with a conversion time up to 0.5 microseconds
 3. Those whose conversion error is 1/10,000 of the maximum measurable amount
 4. Those whose merit value is 1 billion or more

- (3) Analog-digital converters and resolver-type digital-analog converters of the synchro type not using electron tubes; and digital-analog converters with a resolution better than 1/5,000 of the maximum measurable angle
- (4) Mechanical input types corresponding to either of the following--
 - 1. Rotary types whose conversion error is up to 1/40,000 of the maximum measurable amount
 - 2. Beam-shaping types with a resolution better than 5 micrometers
- (5) Those designed to be usable at the specified temperature range
- c) Torque motors designed for gyros or gyrostabilized platforms
- d) Potentiometers corresponding to any of the following--
 - (1) Induction types corresponding to any of the following--
 - 1. Those with a rated conformity of 0.15 percent or less, and an arc of 13 minutes or less
 - 2. Those using the Hall effect
 - 3. Those designed for gimbal equipment
 - (2) Noninduction types corresponding to either of the following--
 - 1. Those with a rated conformity within 0.05 percent (1 percent for those of the nonlinear type)
 - 2. Those designed for gimbal equipment
 - (3) Those designed to be usable at the specified temperature range
- e) Induction rate generators corresponding to any of the following--
 - (1) Those with an outer diameter up to 51 mm, a length up to 102 mm and corresponding to either of the following--
 - 1. Those whose rated conformity is 0.1 percent or less

2. Those having devices for correcting the effects of temperature change
 - (2) Those using the Hall effect
 - (3) Those designed to be usable at the specified temperature range
- f) Servomotors corresponding to any of the following--
 - (1) Those designed to run on electric power supplied from sources whose frequency exceeds 400 hertz
 - (2) Those designed to have a torque-inertia ratio of 50,000 radians or better/sec²
 - (3) Those having damping devices against internal vibration
 - (4) Those using the Hall effect
 - (5) Those designed to be usable at the specified temperature range
- g) Synchronous motors corresponding to any of the following--
 - (1) Those with a diameter up to 51 mm and synchronous speeds beyond 3,600 rpm
 - (2) Those designed to run on electric power supplied from a source whose frequency exceeds 400 hertz
 - (3) Those designed to be usable at the specified temperature range
- h) Electro-optical instruments for measuring rotation
- i) Probes for measuring the Hall effect and corresponding to any of the following--
 - (1) Those using indium-arsenide-phosphide for their material
 - (2) Those coated with ceramic material
 - (3) Those with a sensitivity exceeding 1.2 volts per ampere-tesla when their circuits are open
 - (4) Those designed to be usable at the specified temperature range

175	Vessels (except those for military use, and those driven by oars or sails; and their hulls	All areas
175-2	Boilers for ships and boats designed to have a maximum hourly heat production per 0.0283 m ³ of furnace volume of 45,360 kilocalories or better, and an index of 0.83 or better, obtained by dividing the maximum hourly steam production by the furnace's dry weight	Area A
175-3	Gas turbine engines for vessel propulsion having a rated shaft output of 3,500 horsepower or better	Area A
176	Aircraft (except those for military use), and their parts, accessories, support equipment and instruments	Area A
177	Ground trainers for aviation, their parts and accessories	Area A
178	Self-contained underwater equipment	Area A
196	Electrically controlled and operated shutters with a shutter speed up to 100 microseconds, those of the carbon extrusion type, and those using photochromic effects	Area A
197	Guns and their ammunition (including those used for illuminating or smoke emission), and their parts and accessories (except rifle scopes)	All areas
198	Explosives (other than ammunition for guns), the equipment to drop or propel them, and their parts and accessories	All areas
199	Ammunition (except explosives) and jet fuel (limited to that with an overall heat-generating rate of 13,000 calories per gram or more)	All areas
200	Explosive stabilizers	All areas
201	Military vehicles and their parts	All areas
201-2	Military ships and boats, their hulls and parts	All areas

201-3	Military aircraft, their parts and accessories	All areas
202	Antisubmarine and antitorpedo nets, and buoyant electric cable for sweeping magnetic mines	All areas
203	Armor plate, military steel helmets, bulletproof clothing, and their parts	All areas
204	Military searchlights and their control equipment	All areas
205	Military bacterial agents, chemical agents and radio-active agents; and the equipment for dispersing them, protecting against them or detecting and identifying them	All areas

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ECONOMIC

CHANGE IN ECONOMIC CURRENT IN PRC DISCUSSED

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[Article by Ichizo Kimura, executive director, Sino-Japanese Economic Trade Center]

[Text] Reviewing the 30 Years Since National Founding

In June of this year, the Japanese Light Industrial Products Exhibition was held in Shenyang, formerly Mukden.

Approximately 300 persons concerned with the exhibits participated, and as the leader, I attended the opening ceremonies of the exhibition, which was very well received locally. During my brief 2-day stay, there were a number of feelers for joint ventures with the exhibitors.

Subsequently, I participated in the Sino-Japanese People's Conference, after which I visited Urumqi in Xinjiang Province and Hainan Island. I visit the PRC five or six times a year, and recently I have strongly felt that the policies presently followed by the PRC are deeply rooted in the populace and are definitely succeeding. In particular, the farming villages are active and their climate is changing completely.

As is well known, because of Mao Zedong's errors in his latter years, the PRC pursued extremely leftist and radical economic policies that eventually led to the "Great Cultural Revolution," which might be termed a rebellion. His successor, Hua Guofeng, was a Mao Zedong worshipper who was unable to establish proper order and control. Thereupon, with Deng Xiaoping as the central figure, Chen Yun and other leaders made a comprehensive scrutiny of Mao Zedong's errors in his late years as well as their own. The result was the Third Plenary Session of the Chinese Communist Party Central Committee in late 1978. To put it simply, at this meeting, developments in the 30 years since the national founding were reviewed, actual conditions in the PRC were studied from the viewpoint of "seeking truth from facts," which is said to be the essence of Mao Zedong's Thoughts, and China's unique course of "PRC-style modernization," with top priority on economic construction through sound measures suited to the actual situation, was decided upon.

Then, what were Mao Zedong's errors in his latter years? Excuse me for theorizing Zedong but to put it briefly, in my own interpretation, the errors of Mao Zedong in his latter years were the result of violations by none other than Mao, himself, of the very Thoughts he had created on his own initiative.

Therefore, it is entirely unsound to view Deng Xiaoping's methods as "anti-Maoist" or "un-Maoist."

"Seeking truth from facts" means the grasping of reality as it exists and adopting policies and measures to fit it. In other words, if one becomes idealistic by confusing theory with reality, one can become extremely leftist and commit the error of radicalism.

The present policy of the PRC is to carry out its unique PRC-style modernization, which starts from reality based on the national situation and the country's actual conditions. To put it another way, the course of PRC-style modernization is to upgrade the present immature socialistic country to a mature and powerful socialist nation.

I believe that the realistic, sound and dependable policy of the present-day PRC, that of grasping the actual national situation and focusing on the great objective of improving the people's livelihood, is a wise one.

If Mao Zedong is the founding father of new China, then Deng Xiaoping, who took over after Zhou Enlai, still idolized by all as an unparalleled premier, might be called the restorer of new China who put the country's construction back on track and is pushing for new economic development.

While there are a considerable number of people who fear that the course and policies presently followed by the PRC might change in the future, with due respect, I consider that these are merely groundless apprehensions. The reason is that the PRC-style modernization course and policies being pursued by China at present are very practical and cannot be changed, even if one wanted to, no matter who becomes the leader. Moreover, this course and these policies have become firmly rooted in the huge population of several hundred million.

Promoting Reform and Liberalization

Then the question arises as to what are the focal points of the PRC-style modernization. The answer is the coordination of the balance between industry and agriculture, the balance between the heavy and light industries and the balance between consumption and accumulation so as to serve to improve the people's livelihood. Simultaneously, the main point of the present policy is the promotion of reform of the economic administrative setup and economic liberalization measures. To implement these two significant measures of reform and liberalization, an extensive administrative reorganization was first carried out. For example, central government ministries and agencies were reorganized and consolidated into half the number, 2 million elderly senior officials were withdrawn through enforcement of the retirement system, and in their place, capable young leaders were assigned.

Vice Premier Li Peng, who will visit Japan to attend the 30th anniversary ceremonies of our Sino-Japanese Economic Trade Center (formerly, Kansai Office of the Association for Promotion of International Trade, Japan), is a leading figure among the newly risen young officials and the foremost prospect to head the State Council. The large-scale generation change in the PRC resembles the situation in Japan when management leaders were completely changed by the post-war purge.

Together with the reorganization-consolidation and large reduction of personnel of the central government ministries and agencies, measures aimed at "separation of government administration and production" and "delegation of authority" have been carried out. Authority is being delegated from central to the local governments and from government agencies to enterprises or companies and plants.

Through these administrative reform and economic liberalization measures and the introduction of the principles of competition, efforts have been made to activate the economy. The total industrial and agricultural output attained the 1985 goals 2 years ahead of schedule. Particularly noticeable is the situation of the extensive farming villages. Through elimination of inequalities and introduction of the production-consumption system, whereby income increases according to production, the farmers' will work suddenly heightened and incomes greatly enlarged, with big harvest continuing each year. Farming villages are showing an unprecedented briskness and a type of consumer boom can be seen.

The 800 million farming villages are showing drastic change, from the natural economy which continued for several thousand years to a commercial economy. There is no comparison, on this score, with the agricultural land reform of postwar Japan. Hereafter, if proper and timely measures for farming villages, science and technology transfer, mechanization, etc., are carried out in earnest, the situation of the 800 million farming villages will change radically and their emergence as a huge new market can be anticipated.

In urban industries, too, real efforts are being made to activate the economy by pushing reforms such as the introduction of the competitive principle which has been successful on the farms, expansion of the authority of enterprises, etc. For example, the bidding system is used for all construction of buildings in Beijing, and as a results, the construction time has been substantially shortened. The incomes of personnel in the construction firms have also become dependent on their performance results. As compared with agriculture, industry is complicated and will require more time, but in general, conditions in the PRC are excellent and the political situation is very stable because the people's living standards are the highest since the country's founding.

However, it is absurd to assume that there are no problems in the PRC. The PRC is laden with problems which require solution. In any case, it is a huge country with 1 billion persons faced with the immense task of introducing and incorporating the market mechanism in a planned economy. Although facing many problems, such as transportation and energy problems which require immediate attention for economic development, problems of price control and unified operation of production and distribution activities, etc., the country is

progressing, much better than we expected, toward PRC-style modernization, with two main measures of reform and liberalization as its steadfast policy. Reflecting this, Sino-Japanese trade is on the threshold of a new expansion period, and this year's trade is expected to increase about 30 percent over last year's.

Increasing Inroads of Joint Enterprises

There are 29 provinces and autonomous districts in the PRC, and underground resources are abundant and awaiting development. There are nine provinces with 50-100 million persons--each equivalent to that of a leading European nation. I believe that the PRC statesmen are faced with awesome responsibilities, since they have multitudinous tasks to perform such as regional development, restructuring of the nation's 400,000 enterprises; reconstruction of port facilities at Shanghai, Luda, Tianjin, etc; establishment of a transportation network of railways, expressways, etc; construction of farm houses said to number 100 million; redevelopment of principal cities; improvement of the distribution system; training of production and managerial personnel, etc.

Through economic liberalization measures, Fujian and Guangdong Provinces were established as special economic zones, and in addition, 14 coastal cities, including Dairen, Tianjin and Shanghai, and Hainan Island, which is about the same size as Kyushu, were opened to foreigners and designated as economic development zones.

As compared with Europe and the United States, Japan is still far behind in the introduction of amalgamated enterprises, but with the recent liberalization of coastal cities, the PRC should see a rapid increase because preparations are being made, starting with Luda, for the establishment of many joint enterprises.

Although at the beginning stage, the PRC strongly desires the participation, especially of Japan, in joint ventures, because it wants to acquire not only production technology but Japanese business management skills, which are the most highly rated in the world, through joint ventures even if the costs are higher than through securing loans.

The United States and West European countries have more joint enterprises with the PRC than with Japan. The United States, especially, has far more Sino-American joint enterprises, and the underlying reason is strongly believed to be the all-out support of the U.S. Government, which highlights the differences in response between the Japanese and U.S. Governments.

Regarding the joint venture question, I want to add that the PRC strongly desires joint ventures with Japan, which excels in enterprise management as mentioned earlier, and is granting very favorable treatment. For example, preferential measures include income taxes of 15 percent, in contrast to 17.5 percent in Hong Kong, and nontaxation for the first 2 years after a joint enterprise begins to show a profit and for the following 3 years, 50 percent taxation.

If Sino-Japanese joint enterprises are to be set up, I believe it should be done as soon as possible, preferably at once. The reason is that if joint ventures which serve as models for the different industries in various cities are established, the PRC's interest in joint ventures might change, and I am skeptical as to how long it will continue the preferential treatment.

In the several years before joint venture laws and regulations were established, Hitachi, Ltd. formed the Fujian-Japan TV Corp in Fujian Province. The corporation has developed smoothly and has become a model factory of a representative joint venture. The PRC is a country which honors faith and is still fervently following the teachings of former Premier Zhou Enlai, who said: "Honor a promise to a foreign friend as though it were worth its weight in gold."

As for urban planning, comprehensive designs looking to the future are lacking. Take, for example, Luda. The liberalized economic zone covers the three northeast provinces, but there are no overall plans for port construction for the liberalized zone, and, as usual, studies of the relationship between distribution and transportation problems are inadequate. It seems that priority is being given only to the establishment of the economic development zone. Perhaps, it is necessary to further develop infrastructural relationships. In other words, the evils of "vertical" administration also appear here.

Generally speaking, feudalistic practices and bureaucratism, still deeply imbedded in the PRC, are manifested as vertical and horizontal sectionalisms in the economic setup reform. I believe that sooner or later these evil trends will require the strong guidance and actions of the central government.

For the past several years I have presented policy proposals to the State Council. Complete dependence on plant imports will not only result in the waste of foreign currency but, worst of all, it will not develop technologists. Eventually, the PRC will follow in the footsteps of Poland and stable development of Sino-Japanese trade will become difficult because of involvement in "adjustments." I have proposed for the past several years that the first priority is the introduction of production technology and key elements to reconstruct and expand the existing 400,000 enterprises so that they can operate fully, and this policy has been taken into consideration for the past several years.

It happened that experiences gained in Japanese postwar economic recovery, made possible through technological imports, were described to the PRC leaders, and last fall a Sino-Japanese Technological Import Experiences Exchange Seminar was held under the sponsorship of the State Economic Commission. As the group leader, I participated with experts of several enterprises in discussions lasting over 2 hours. The proceedings were printed and distributed in several tens of thousands of copies; there are still many unresolved items, however, and it appears that the principal blame for the PRC's faulty technological imports lies with the Japanese side. However, in many instances, the PRC side shows lack of experience and is not clearcut as to its intentions, so I plan to visit the PRC shortly to exchange views.

Establishment of Special Zones Like Hong Kong

In any event, technology is a valuable asset, and by importing technology and giving development through intensive training, and good results can be achieved. I believe that the PRC side does not yet fully understand this point.

From our 30 years of experience in Sino-Japanese trade, we can say with respect to the new problems that constantly arise in each age and period, that if we make timely policy proposals for their solution to the PRC side, seeking solutions at times through heated discussion but always approaching problems through full and repeated Sino-Japanese consultation, we believe that there will be few mistakes and that Sino-Japanese economic exchange will surely develop.

Furthermore, to promote economic and trade relations with the PRC, one must carefully ascertain the movements of the other side after fully grasping its basic policies, break away from stereotyped thinking by eliminating all preconceptions and prejudices, and consider long-range views as well as existing conditions in establishing a strategy which takes into account both immediate and future profits. However, once a decision is made regarding an enterprise, it is necessary to pursue the objective with perseverance.

As for the future market prospects of the PRC, the PRC-style modernization of a country with a population of 1 billion and the union of a planned economy and market mechanism is one of the great experiments of this century and is unprecedented in scale in world history. I believe that its future trends and course will have a tremendous international impact. At present, matters are progressing much more smoothly than anticipated, and at this rate I believe that before the end of this century the PRC will emerge as the only huge realistic market left in the world.

I believe that the recent U.S.-West European inroads into the PRC, which are unusually aggressive, are a reflection of that trend.

For Japan, which is currently saddled with problems such as the uncertainty of the U.S. economic future, the international strengthening of trade protection, the accumulating debt problems of developing countries and the rapidly aging population of the nation, the Sino-Japanese trade, the composition of which is excellently suited to complement each other's needs, should find the neighboring PRC market of increasing importance together with that of the United States.

To respond to the new upsurge in Sino-Japanese trade and to meet the new developmental period of that trade, we have decided to change the old name, "Kansai Office of the Association for Promotion of International Trade, Japan," which we used for many years. As an independent national organization devoted not simply to economic trade but specifically to Sino-Japanese economic trade, we aim to serve by utilizing our 30 years of experience.

In conclusion, I wish to comment on the Hong Kong problem. As reported in the newspapers, an amicable settlement should be made officially in the near future.

The development of the Shenzhen special economic zone in Guangdong Province, which adjoins Hong Kong, is astonishing. In only 5 years after the special zone was established, the appearance of small, rural Shenzhen completely changed to one bristling with medium- and high-rise buildings.

The projects established jointly with foreign enterprises numbered over 2,500 as of last year. At present, Shenzhen can be called the epitome of the PRC foreign liberalization program.

If the socialist PRC can securely guarantee the profits of private enterprises in the special zones, those in Hong Kong and Taiwan who still maintain capitalist practices can feel more at ease.

Taiwan is watching Hong Kong, while Hong Kong is watching Taiwan.

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